FEDERAL AVIATION REGULATIONS

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION—WASHINGTON, DC

CHANGE 12

EFFECTIVE: FEBRUARY 7, 1997
MARCH 12 AND 21, 1997
MAY 1, 1997

Part 135—Operating Requirements: Commuter and On-Demand Operations

Two pages were numbered incorrectly in Change 11. Pages numbered S–111 and S–112 should have been numbered S–110–1 and S–110–2. Please make a pen and ink change to these pages.

This change incorporates two amendments, removes then reinstates SFAR 50–2, and adds SFAR 78:

Amendment 135–66, Operating Requirements: Domestic, Flag, Supplemental, Commuter, and On-Demand Operations: Editorial and Other Changes, adopted and effective March 12, 1997. This amendment affects §§ 135.2, 135.21, 135.25, 135.64, 135.153, and 135.427.

Amendment 135–67, Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers; Editorial and Other Changes, adopted March 18 and effective March 21, 1997. Section 135.324 is affected.

SFAR 50–2, Special Flight Rules in the Vicinity of Grand Canyon National Park, adopted December 24, 1996 and effective May 1, 1997, removes SFAR 50–2; and SFAR 50–2 adopted February 21 and effective May 1, 1997, reinstates this regulation.

Special Federal Aviation Regulation (SFAR) 78, Special Flight Rules in the Vicinity of the Rocky Mountain National Park, adopted January 3 and effective February 7, 1997.

Bold brackets enclose the most recently added or changed material. The amendment number and effective date of new material appear in bold brackets at the end of each section.

Page Control Chart

Remove Pages	Dated	Insert Pages	Dated
P–839	Ch. 11	P–839 through P–850	Ch. 12
Subpart A	Ch. 11	Subpart A	Ch. 12
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Subpart H	Ch. 11	Subpart H	Ch. 12
Subpart J	—	Subpart J	Ch. 12
S–90–3 through S–94	—	S–90–3 through S–94	Ch. 12
		S–123 through S–143	Ch. 12

Suggest filing this transmittal at the beginning of the FAR. It will provide a method for determining that all changes have been received as listed in the current edition of AC 00–44, Status of Federal Aviation Regulations, and a check for determining if the FAR contains the proper pages.

Conclusion

The FAA has determined that this regulation imposes no additional burden on any person. Accordingly, it has been determined that the action: (1) is not a significant rule under Executive Order 12866; and (2) is not a significant rule under Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); Also because this regulation is of editorial nature, no impact is expected to result and a full regulatory evaluation is not required. In addition, the FAA certifies that the rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

The Amendments

In consideration of the foregoing, the Federal Aviation Administration amends the Federal Aviation Regulations (14 CFR parts 119, 121, and 135) effective July 15, 1996.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

Amendment 135–66

Operating Requirements: Domestic, Flag, Supplemental, Commuter, and On-Demand Operations: Corrections and Editorial Changes

Adopted: March 12, 1997 **Effective: March 12, 1997**

(Published in 62 FR 13248, March 19, 1997)
(Corrected in 62 FR 15570, April 1, 1997)

SUMMARY: The FAA is amending parts 21, 25, 91, 119, 121, 125, and 135 to correct errors, make terminology consistent, or clarify the intent of the regulations published on December 20, 1995 (60 FR 65832). A few changes are to clarify existing rules or to deal with other long-standing exemptions. A new Special Federal Aviation Regulation is being issued to address three problems that relate to compliance with requirements for communications facilities and aircraft dispatchers by operators in Alaska and other areas.

FOR FURTHER INFORMATION CONTACT: Katherine Hakala, Flight Standards Service (AFS), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–8166 or 267–3760.

SUPPLEMENTARY INFORMATION:

Availability of the Final Rule

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703–321–3339) or the Federal Register's electronic bulletin board service (telephone: 202–512–1661).

Internet users may reach the FAA's web page at http://www.faa.gov or the Federal Register's webpage at http://www.access.gpo.gov/su__docs for access to recently published rulemaking documents.

Any person may obtain a copy of this final rule by mail by submitting a request to the Federal Aviation Administration, Office of Rulemaking, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267–9677. Communications must identify the docket number of this final rule.

Persons interested in being placed on the mailing list for future NPRM's should request from the FAA's Office of Rulemaking a copy of Advisory Circular No. 11–2A, Notice of Proposed Rulemaking Distribution System, that describes the application procedure.

Background

On December 20, 1995, new part 119, Certification: Air Carriers and Commercial Operators, was published in the *Federal Register* (60 FR 65832; December 20, 1995). Part 119 reorganizes, into one part, certification and operations specifications requirements that formerly existed in SFAR 38–2 and in parts 121 and 135. The final rule for new part 119 also deleted or changed certain sections in

part 121, subparts A through D, and part 135, subpart A, because the requirements in those subparts have been recodified in part 119. On January 26, 1996, another final rule was published (61 FR 2608) affecting parts 119, 121, and 135. That amendment made editorial and terminology changes in the remaining subparts of parts 121 and 135 to conform those parts to the language of part 119 and to make certain other changes. Additional documents making editorial changes and corrections were published on March 11, 1996 (61 FR 9612), and June 14, 1996 (61 FR 30432).

Part 119 was issued as part of a large rulemaking effort, known as the "commuter rule," to upgrade the requirements that apply to scheduled operations conducted in airplanes that have a passenger seat configuration of 10 to 30 passengers. As of March 20, 1997, these operations will be conducted under the requirements of part 121, in accordance with the final rule published on December 20, 1995.

Notice of Proposed Rulemaking

On February 3, 1997, the FAA published an NPRM (62 FR 5076; Notice No. 97–1) proposing changes to correct errors, make terminology consistent, clarify the intent of part 119 and the commuter rule published on December 20, 1995, as well as make other minor changes not directly related to the commuter rule. These proposed changes are considered important because, as a result of the implementation of part 119 and the completion of the transition process for commuter operations affected by the final rule, a number of questions of interpretation have been raised and errors in previous final rules have been identified. In addition, a new Special Federal Aviation Regulation (SFAR) is needed to address three problems that relate to compliance with requirements for communications facilities and for aircraft dispatchers by operators in Alaska and other areas.

Public Comment

The FAA requested comments, within 30 days of publication of Notice No. 97–1, on a number of proposals contained in the NPRM. Interested persons were invited to participate in this rulemaking action by submitting written data, views, or arguments. All comments received were considered before issuing this final rule.

The FAA received 19 comments in response to Notice No. 97–1. Comments were received from operators affected by the proposed rule, aircraft dispatchers, industry associations, and a manufacturer of communications system. Many commenters stressed the importance of having the final rule issued before March 20, 1997, when the majority of the commuter rule provisions go into effect. Other specific comments are summarized in the following section-by-section discussion of the final rule, which includes the FAA's responses to these comments.

Explanation of Amendments

A number of changes are necessary in parts 21, 25, 91, 119, 121, 125, and 135 to correct typographical errors, to make minor editorial changes that help clarify the intent of the rules, or to make editorial changes that make related rules consistent with each other. These types of changes are not individually explained. However, a number of changes require some explanation, which follows:

1. The proposal revised the definitions of "on-demand operation," "scheduled operation," and "supplemental operation" in § 119.3 to make it clear that public charter operations conducted under 14 CFR part 380 are not considered scheduled operations.

No comments were received on the proposed definitions and the changes to § 119.3 are adopted as proposed.

2. The proposal amended § 119.5 to add new paragraph (k), which incorporated former § 135.31 into part 119. As proposed, this section prohibited advertising or otherwise offering to perform any operation unauthorized by the FAA, and it was applicable to any person, including certificate holders operating under part 121, as well as those operating under part 135.

The proposal also added § 119.5(l) which stated that, for safety purposes, people who operate aircraft under parts 121 and 135 must comply with the provisions in a certificate holder's operations specifications. This paragraph was proposed to prevent an employee of a certificate holder (with or without other certificate holder's knowledge) from violating the provisions of the certificate holder's operations specifications. For example, if a certificate holder is only authorized to carry cargo, a flight crewmember would not be allowed to bring along a friend as a passenger on the commercial flight.

No comments were received on these proposals and the changes to § 119.5 are adopted as proposed.

3. The proposal amended § 119.9 to allow displaying the air carrier or operating certificate number on an aircraft instead of the name of the certificate holder. As described in the NPRM, a petition

by the National Air Transportation Association (NATA) and supporting comments requested that, for security and financial reasons, operators be allowed to display the air carrier or operating certificate number in lieu of the name of the certificate holder. In the NPRM, the FAA agreed that display of an air carrier or operating certificate number would meet the intent of this requirement, which is to provide a ready means of identifying a responsible certificate holder when an aircraft is parked and the FAA has reason to identify or contact the certificate holder. Therefore, the FAA proposed to amend § 119.9(b)(4) as requested by NATA.

The proposal also deleted the provision allowing the Assistant Administrator for Civil Aviation Security to grant deviations from the requirements of this section because the FAA no longer believed that these deviations were necessary.

NATA, Helicopter Association International (HAI), and individual operators affected by the proposed change to § 119.9(b) comment in support of allowing part 135 operators to display their air carrier or operating certificate number on an aircraft instead of the name of the certificate holder. Commenters emphasize that, if the FAA adopts the proposed amendment, it is imperative to make the amendment effective before March 20, 1997, so that they will not need to apply the certificate holder's name temporarily on the aircraft, and then remove it when the amendment takes effect later. One operator comments that even having the operating certificate number on the aircraft creates a security risk for some customers.

As discussed above, the FAA must be able to readily identify the responsible certificate holder conducting an operation, and having the air carrier or operating certificate number on an aircraft will provide the necessary identification. Therefore, the changes to § 119.9 are adopted as proposed and are effective as of the date of issuance of this final rule.

4. The proposal amended § 119.21(a)(1) to allow domestic operations conducted from the Pribilof Islands and the Shumagin Islands to request permission to comply with the dispatching requirements of subpart U of part 121 applicable to flag operations. The NPRM also stated that, in the final rule, the FAA may include other Alaskan island locations in this provision, if requested to do so by commenters and if adding the names of those islands is consistent with safety considerations.

No comments were received on the proposal and the changes to § 119.21 are adopted as proposed.

5. The proposal amended § 119.35 to clarify that the additional financial and contract reporting requirements of this section apply only to commercial operators. The proposal split § 119.35 into two sections: Proposed § 119.35 contained just the certificate application procedures that apply to all applicants, and new § 119.36 contained the additional requirements for commercial operators.

In the NPRM, the FAA proposed that § 119.36 distinguish between requirements for all commercial operators and those applicable only to commercial operators under part 121. In addition, the FAA proposed to delete the financial reporting requirements of § 135.64(b), but to retain the contract retention requirements in § 135.64(a).

No comments were received on the proposal and §§ 119.35 and 119.36 are adopted as proposed.

6. The proposal revised § 119.67(c) and (d) to amend the qualification requirements applicable to Directors of Maintenance and Chief Inspectors under part 121. The proposal also revised § 119.71(e) to amend the qualification and experience requirements applicable to the Director of Maintenance under part 135.

Both proposals established requirements for a person becoming the Director of Maintenance or Chief Inspector for the first time. These proposals were designed to ensure that persons holding these required management positions have the measure of experience and the demonstrated capability of effectively managing these programs.

The FAA proposed that, under §§ 119.67(c)(1) and 119.71(e)(1), the Director of Maintenance must have held the airframe and powerplant ratings for 3 years.

The proposal also amended § 119.67(c)(2) by changing the existing 1 year of maintenance experience in a supervisory capacity in maintaining the category and class of airplane used by the certificate holder, to 3 years of supervisory experience within the last 6 years in a position that exercised operational control over maintenance program functions.

In addition, the proposal amended § 119.67(c)(4)(i)(B) by replacing the word "repairing" with the word "maintaining", as the latter is consistent with the definition of maintenance as defined in 14 CFR 1.1. In addition, the word "maintaining" reflects the broader experience level more appropriate to the Director position.

For the Chief Inspector position, the proposal changed § 119.67(d)(2) to require 3 years of supervisory or managerial experience within the last 6 years.

The proposal also revised § 119.67(e) to clarify that certificate holders may request a deviation from the experience requirements of the section, but not from the airman certificate requirements of the section. Therefore, a certificate holder would not be allowed to employ a person who does not hold the required airman certificate (e.g., ATP certificate, commercial pilot certificate, mechanic certificate).

Proposed § 119.71 contained the management qualification requirements that formerly appeared in § 135.39. Section 119.71(b) and (d) required that the Director of Operations and the Chief Pilot, respectively, must hold at least a commercial pilot certificate with an instrument rating. However, under former § 135.39 the instrument rating was required only if any pilot in command for that certificate holder was required to have an instrument rating. For operations such as a VFR only helicopter operation, the pilot in command is not required to hold an instrument rating. Therefore the FAA proposed that § 119.71(b) and (d) be revised to match the intent of former § 135.39.

HAI comments in support of the proposed amendment of § 119.71(b) and (d) on behalf its membership, which includes a substantial number of VFR-only helicopter operations. HAI states that without the amendment to § 119.71(b) and (d) many operators would be forced to suspend operations until personnel that meet the current requirements can be identified and hired, and that there may not be enough such personnel available. HAI believes that this burden would be onerous and inappropriate in view of the fact that the operators in question do not conduct instrument operations.

The FAA agrees with HAI's comments and the amendments to § 119.71(b) and (d) are adopted as proposed. No comments were received on the proposal to revise §§ 119.67(e) and 119.71(f) and those amendments are adopted as proposed. The FAA has reviewed the proposed changes to the experience requirements for Director of Maintenance and Chief Inspector in light of issues raising during implementation of the commuter rule and the determined that further study of these proposal is necessary. Therefore the FAA withdraws the proposal amendments to §§ 119.67(c) and (d) and 119.71(e), for consideration in a future rulemaking.

7. In the NPRM, the FAA proposed that a new Special Federal Aviation Regulation (SFAR) be added to part 121 to address two problems that relate to compliance with § 121.99 and a third problem that relates to compliance with § 121.395. These are outlined below.

(1) The first problem involves certain communications difficulties in Alaska and other areas affecting certificate holders who are required by § 121.99 to "show that a two-way air/ground communication system is available at all points that will ensure reliable and rapid communications under normal operating conditions over the entire route (either direct or via approved point to point circuits) between each airplane and the appropriate dispatch office and between each airplane and the appropriate air traffic control unit."

The NPRM pointed out that, in certain areas, the lack of infrastructure or appropriate technology has prevented certificate holders from establishing such systems. For other certificate holders, the nature of their operations (e.g., flying at low altitudes or in mountainous terrain) has prevented them from using current communication systems that may be reliable only at higher altitudes.

If a certificate holder shows to the Administrator that communications gaps exist due to such reasons as lack of infrastructure, ATC operating restrictions, the terrain, operating altitude, or feasibility of a certain kind of communications system, the certificate holder would be allowed to continue to operate over that route if the certificate holder establishes alternative procedures for prompt re-establishment of communication, for establishment that the airplane arrived at its destination, and for flight locating purposes. Under the SFAR, relief would only be granted after the certificate holder shows that it would meet the requirements to the maximum extent possible. In granting such approval, the Administrator would consider certain factors that are listed in the SFAR.

Under the proposed SFAR, the certificate holder would obtain the approval of the Administrator in its operations specifications. The requests will be processed through the certificate-holding district office, with concurrence by the FAA's Air Transportation Division (AFS–200). This type of alternative compliance approval would only be available for scheduled operations with airplanes having a passenger-seat configuration of 30 seats of fewer, excluding each crewmember seat, and a payload capacity of 7,500 pounds of less under part 121 of this chapter.

(2) The second § 121.99-related problem involves certificate holders who have conducted or who might in the future conduct scheduled intrastate operations in Alaska. Under the pre-commuter rule amendments these operations operated under the rules applicable to flag air carriers and thus, under the last sentence of § 121.99, were not prohibited from using a communications system operated by the United

States. For certificate holders operating intrastate in Alaska, whether certificated before or after January 19, 1996, it was considered impractical at that time to mandate that the required communications systems be independent of any system operated by the United States.

Therefore even though these certificate holders would otherwise have been required to comply with the operating rules for domestic operations, under the proposed SFAR they would be allowed to use systems operated by the United States, when there is no practical alternative, for the 4-year effective period of the SFAR. The FAA further proposed to amend § 121.99 to require that, concurrent with the expiration of the SFAR, all flag operations in Alaska, not just those affected by the commuter rule change mentioned above, have communications systems that are independent of any system operated by the United States.

(3) The third issue addressed by the proposed SFAR relates to the use of aircraft dispatchers by former commuter operations in Alaska who are required by the commuter rule to have a part 121 dispatch system. It is long-standing FAA policy that each certificate holder subject to § 121.395 have aircraft dispatchers that are employed exclusively by that certificate holder. However, small operations located in remote areas have found it hard to attract qualified, certificated aircraft dispatchers to work and live in those areas.

Therefore the FAA proposed to allow certificate holders conducting scheduled operations in Alaska with airplanes having a passenger-seat configuration of 30 seats or fewer, excluding each crewmember seat, and a payload capacity of 7,500 pounds or less under part 121 of this chapter, to share aircraft dispatchers if they are authorized to do so by the Administrator in their operations specifications. The requests will be processed through the certificate-holding district office, with concurrence by the FAA's Air Transportation Division (AFS–200). Before granting such an authorization, the Administrator would consider certain factors that are listed in the SFAR.

The FAA proposed that the SFAR would expire 4 years after it is issued because the FAA expects that adequate communications facilities would become available in all parts of Alaska and other areas within that time.

Several commenters address the provisions in the proposed SFAR. The Air Transport Association (ATA) sees no reason why the SFAR should be so restrictive and limited to commuter operations, because from a safety standpoint, larger aircraft have greater fuel capacity and alternate airport capability, and generally have a larger safety margin built in than small commuter aircraft. NATA believes that the proposed SFAR does not adequately address the special nature of flight operations in rural Alaskan areas, because the inherent problem is that Alaska simply does not have the infrastructure to guarantee communications in remote areas. Also NATA believes that operations in designated remote areas, where flights are mainly VFR, flight plans frequently change, and airports are often unattended, should not be subjected to the same stringent dispatching requirements applied to other part 121 operations. An aeronautical communications company disagrees with FAA's statements on lack of infrastructure and availability of appropriate technology. This commenter believes that there is a wide variety of choices available to meet the communication needs for positive operational control and that operators in remote geographical areas may need to make a combination of choices to allow them to meet the requirements of the current rules.

The Airline Dispatchers Federation (ADF) and an individual aircraft dispatcher address the relationship between the communications system required by § 121.99 and the role of the aircraft dispatcher in providing information that may affect the safety of the flight to the pilot in command. ADF believes that adequate air ground communication technology is available for Alaskan operations, but that if there is a lack of weather reporting along their routes, air carriers can provide station and other personnel with telephone, dial access radio, HF, VHF, or SatComm communications and provide them with the training to provide accurate weather and aerodrome information. ADF further suggests that Alaskan air carriers cooperate to build their own radio network to cover their routes or that the State of Alaska may want to help finance any additional infrastructure required for scheduled air service in Alaska.

ADF suggests that Alaskan pilots, operating under a "bush" mentality, have knowingly flown in IMC or VFR flights in response to operational pressures, and that when adequate communication systems are in place and aircraft dispatchers are able to obtain accurate information on weather and other local conditions, the pilots will no longer be able to decide on their own whether or not to initiate or continue a particular flight, because, if the information does not show the operation can be conducted safely, the dispatcher may not authorize the flight.

ADF and the aircraft dispatcher object to FAA's proposal to allow Alaskan air carriers to share aircraft dispatchers under certain conditions. The commenters fear that a dispatcher working under contract or exercising operational control on a competitor's flight may have his or her actions second-guessed

by the management of the other airline. ADF comments that a shared dispatcher may be kept at a distance from the operations and only told what company employees want the dispatcher to know.

ADF and the dispatcher believe that part 135 operators who have faced the challenge of complying with the communications and dispatching rules of part 121 should be commended and not effectively penalized economically by competitors who take advantage of the provisions in the proposed SFAR.

After careful consideration of these comments, the FAA has decided to issue the SFAR as proposed. The FAA disagrees with ATA's assertion that the SFAR should also apply to air carriers operating larger planes, but instead agrees with ADF that the rules in part 121 requiring adequate communications systems and a full aircraft dispatching system for scheduled operations have contributed for many years to a high level of safety that should be applied as well to scheduled operations affected by the commuter rule. The purpose of the SFAR is to allow the FAA, the affected commuter operators, and the communications equipment industry to work together to bring every commuter operator into compliance with part 121 as soon as possible. However, the FAA's experience in implementing the commuter rule has been that there *are* gaps in certain remote areas that could not be remedied before the March 20, 1997, deadline for implementing the commuter rule. This is the exception rather than the rule. The limited number of commuter operators who have not been able to close the communications gaps along all of their routes have been evaluating systems and trying to develop plans for complying with § 121.99. The SFAR will allow extra time for the installation of ground-based systems, the development of satellite systems, or the development and approval of technology appropriate to the needs of remote operators.

The FAA agrees with commenters that the role of aircraft dispatchers is critical to ensuring the safety of flight, particularly in areas such as Alaska that are subject to difficult and changing weather conditions. That is why the FAA is not excepting Alaskan carriers from the dispatcher requirement. However, under section 1205 of the Federal Aviation Reauthorization Act of 1996 (Pub. L. 104–264), when modifying regulations affecting intrastate aviation in Alaska, the FAA Administrator must consider the extent to which Alaska is not served by transportation modes other than aviation, and must establish such regulatory distinctions as the Administrator considers appropriate. Also, in implementing the commuter rule, the FAA has found that in the unique environment of Alaska, it is difficult to recruit and retain qualified certificated aircraft dispatchers. The commenters' fears about the potential for contract dispatchers or dispatchers exercising operational control over competitors' flights are unwarranted because the SFAR allows for the sharing of dispatchers by 2 companies, not for the contracting out of dispatching services. The 2 companies would be authorized to share a dispatcher only when the companies can show to the FAA that they have joint plans for complying with the dispatcher training and qualification rules and that the number of flights for which the dispatcher would be responsible would not be beyond the capacity of a single dispatcher.

The FAA does not think that authority to operate under the SFAR would provide an economic advantage to a commuter operator because the authority will be granted in a very limited number of cases and only when the operator has shown to the FAA that it is proceeding on a plan and has a schedule for coming into full compliance with the part 121 rules within 4 years.

8. The proposal amended § 121.99 to allow for "other means of communication approved by the Administrator" as an alternative to the two-way radio communication system required by that section. This would allow certificate holders to use other types of technology, such as datalink or telephonic communication systems, to comply with this section.

No comments were received on the proposal and the changes to § 121.99 are adopted as proposed.

9. The proposal amended the manual requirements in §§ 121.137, 121.139, 125.71, 135.21, and 135.427 to make these sections compatible with § 121.133. (Section 121.133 had been revised in the commuter rule to allow a certificate holder to prepare its maintenance manual in any form acceptable to the Administrator.) Therefore, the FAA proposed in the NPRM to include the language "any form acceptable to the Administrator" in the sections above.

The proposal also amended these sections to clarify that, regardless of the form of the maintenance manual, it must be retrievable in the English language. Certificate holders who purchase equipment from foreign manufacturers or previous foreign owners must ensure that the maintenance instructions to be followed by their employees and reviewed by the FAA are in English.

No comments were received on the proposal and the changes to the manual requirements are adopted as proposed.

10. The proposal revised § 121.305(j) to clarify the requirements for third attitude indicators for turbopropeller-powered airplanes having a passenger seat configuration of 30 seats or fewer and turbo-

propeller-powered airplanes with more than 30 seats. The latter have been required to have third attitude indicators since October 1994.

No comments were received on the proposal and the changes to § 121.305 are adopted as proposed.

11. The FAA proposed to allow 2 years from the date of the final rule for the affected operators to install emergency exit locating signs that comply with § 121.310(b)(1). The additional 2 years for compliance would be granted to both in-service 10–19 seat airplanes and newly manufactured 10–19 seat airplanes. Paragraph (b)(1) of § 121.310 requires that the identity and location of each passenger emergency exit must be marked so that the exit is recognizable from a distance equal to the width of the cabin and that the location of the exit must be indicated by a sign visible to occupants approaching along the main passenger aisle. Paragraph (b)(1)(i) requires that one of the locating signs must be on the ceiling of the cabin. Because of limited headroom, most of the 10–19 seat airplanes used by operators subject to the commuter rule do not have locating signs on the ceiling, but have been allowed to use two-dimensional signs mounted flush to the cabin sidewalls. For these 10–19 seat airplanes with limited headroom, the simplest means of complying may be to replace the two-dimensional signs with beveled or three-dimensional signs that can be read easily at the cabin extremes; that type of sign would function to both identify and locate the corresponding exit.

The FAA also proposed adding a paragraph (b)(2)(iii) to § 121.310; this paragraph identifies the certification requirements for passenger emergency exit marking and locating signs. The proposal addressed the 10–19 passenger seat nontransport category airplanes. Similar to paragraph (b)(2)(i), it would mandate that the sign luminescence be 160 microlamberts at the time of manufacture; it would also prohibit the use of a sign in service if the luminescence decreases to below 100 microlamberts. Proposed paragraph (b)(2)(iii) should provide adequate levels of luminescence; the signs would have the same brightness as signs in some transport category airplanes currently manufactured and currently operated under part 121, which have no longer distances between exits than the 10–19 passenger seat airplanes.

No comments were received on the proposals and the changes to § 121.310 are adopted as proposed.

12. The proposal amended § 121.133(c) to correct an omission concerning the use of quick-donning oxygen masks at flight levels above 250 as a substitute for having one pilot at the controls wear and use an oxygen mask at all times. For pressurized turbine engine powered airplanes, § 121.333(c) has allowed the availability of a quick-donning mask to be a substitute for wearing and using a mask at all times at or below flight level 410. However, under § 135.89(b)(3) at least one pilot at the controls of a pressurized airplane is required at altitudes above flight level 350 to wear and use an oxygen mask at all times.

For those 10–30 passenger airplanes that will be operating under part 121 as a result of the commuter rule amendments, the proposal stated that flight level 350 rather than flight level 410 would continue to be the appropriate altitude at which at least one pilot at the controls would be required to wear an oxygen mask at all times.

Since the commuter rule was not intended to relax this requirement, the FAA proposed to amend § 121.333(c) to incorporate the requirements of § 135.89(b)(3) for airplanes with less than 31 seats, excluding any required crewmember seat, and a payload capacity of 7,500 pounds or less.

No comments were received on the proposal and the changes to § 121.333 are adopted as proposed.

13. The proposal amended § 121.437 to eliminate a redundancy that was created by an earlier corrective amendment and by adding a new sentence that would have the effect of codifying an existing exemption that had been in effect since 1980.

The FAA granted the ATA an exemption from § 121.437 (Exemption No. 2965), allowing a pilot employed by a part 121 certificate holder as a flight crewmember to be issued additional category and class ratings to the pilot's certificate if the pilot had satisfactorily completed the appropriate training requirements of subpart N and the proficiency check requirements of § 121.441 by presenting proof of this to the Administrator. This exemption was extended 9 times and is due to expire on July 31, 1997.

Over the 16 years that the exemption has been in effect, there has been no known derogation of safety. Therefore, since the FAA has not had the resources to conduct each proficiency check required by the rule, the FAA proposed to codify Exemption 2965 into § 121.437.

ATA supports the proposed changes to § 121.437 and adds that codifying the exemption will also reduce the administrative burden on both the airlines and the FAA. The final rule is adopted as proposed.

Tables 1–4 From the Commuter Rule

In the preamble of the NPRM for this final rule, the FAA corrected and republished 3 tables that were a part of the original commuter rule preamble: Table 2, *Comparable Sections in Parts 121 and 135*, and Tables 3 and 4, the Derivation and Distribution Tables for part 119. There have been no changes to these informational tables since the NPRM was published (February 3, 1997; 62 FR 5076). The FAA is in the process of updating Table 1, *Summary of New Equipment and Performance Modifications for Affected Commuters*, originally published in the commuter rule, to present the delayed compliance dates for the equipment and performance modifications required by the commuter rule and subsequent amendments.

Any person may obtain a copy of Tables 1–4 by mail by submitting a request to: Linda Williams, Federal Aviation Administration, Office of Rulemaking, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267–9685.

Federalism Implications

The regulations herein do not have substantial direct effects on the states, on the relationship between national government and the states, or on the distribution of power and responsibilities among various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), there are no new requirements for information collection associated with this rule.

Good Cause Justification for Immediate Adoption

This amendment is needed to make editorial corrections and other changes to the commuter rule that must be in place before the commuter rule takes final effect on March 20, 1997. In view of this need to expedite these changes, and because the amendments would impose no additional burdens on the public, I find that the amendment should be made effective in less than 30 days after publication. Therefore, this final rule is effective as of the date of issuance.

Conclusion

The FAA has determined that this final rule imposes no additional burden on any person. Accordingly, it has been determined that the action: (1) Is not a significant rule under Executive Order 12866; and (2) is not a significant rule under Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). No cost impact is expected to result and a full regulatory evaluation is not required. In addition, the FAA certifies that the final rule will not have a significant cost impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Adoption of Amendments

Accordingly, the Federal Aviation Administration (FAA) amends 14 CFR parts 21, 25, 91, 119, 121, 125, and 135 effective March 12, 1997.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

Amendment 135–67

Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers; Editorial and Other Changes

Adopted: March 18, 1997 **Effective: March 21, 1997**

(Published in 62 FR 13788, March 21, 1997)
(Corrected in 62 FR 16892, April 8, 1997)

SUMMARY: This amendment makes minor revisions to correct editorial errors. It also revises certain sections of regulations published on July 2, 1996 (61 FR 34508), to make them consistent with the

intent expressed in the notice and final rule. These amendments will not impose any additional restrictions on persons affected by these regulations. This final rule implements new regulations that contain certification and operating rules for training centers that will use aircraft flight simulators and flight training devices for pilot training, testing, and checking.

FOR FURTHER INFORMATION CONTACT: Warren Robbins, Airman Certification Branch (AFS–840), General Aviation and Commercial Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3842.

SUPPLEMENTARY INFORMATION:

Background

On July 2, 1996, a final rule was published that implements new regulations containing certification and operating rules for training centers that will use aircraft flight simulators and flight training devices for pilot training, testing, and checking (61 FR 34508). The training center concept is intended to provide a common source for standardized, quality training accessible to any individual or corporate operator and air carriers.

This rule, in part, amended parts 61, 121, and 135, and added a new part 142 to incorporate aircraft simulation use. Minor editorial changes and minor modifications need to be made to some sections of these amended parts.

Discussion of the Amendments

Part 61

§ 61.4 Qualification and Approval of Flight Simulators and Flight Training Devices

This section is amended by consolidating paragraphs (a), (b), and (c) into a single paragraph (a). Paragraph (b), as amended, adds language that allows devices previously referred to as ground trainers and pilot trainers to continue to be used to meet various requirements of §§ 61.56, 61.57, 61.65, and 61.129, to the extent of their original approval. This was clearly the intent expressed in the preamble to the final rule.

It should be noted that, under revised paragraph (b), only devices qualified under Advisory Circular (AC) 61–66, "Annual Pilot in Command Proficiency Checks" (superseded) may continue to be used to satisfy requirements of § 61.56. All other such devices, to be defined as Level 1 Flight Training Devices in AC 120–45B, may be used only for the purpose and number of credited hours for which they had received acceptance or approval for use prior to August 2, 1996. Any such device must be shown to function as originally designed for the original approval to be valid. To be used for a different purpose or any additional credit, each training device will have to meet § 61.4(a) and the implementing criteria in effect at the time.

Paragraph (c), as amended, adds clarifying language consistent with the FAA's intent to allow, and continue to allow, certain devices not qualified as a flight simulator or a flight training device to be used for specific training, testing, or checking.

§ 61.51 Pilot Logbooks

Paragraph (c)(2)(i) is revised to add words indicating that when the pilot is "the sole occupant of the aircraft," he or she is the pilot in command of that aircraft. Removal of this language was not intended to preclude such a pilot from logging this time as pilot in command. This restores language that appeared in the rule prior to Amendment 61–100, to avoid misinterpretation.

§ 61.55 Second-in-Command Qualifications

This section is amended to correct an editorial error. Under paragraph (b)(3) the words "the requirements of this paragraph (b)(3)" are changed to read "the requirements of paragraph (b)(2)" to provide the correct reference.

§ 61.56 Flight Review

This section is amended by redesignating paragraph (e) as paragraph (d), and by reinstating paragraph (e) as it was amended by Amendment 61–93 (58 FR 40562, July 28, 1993), subsequent to publication of the Notice of Proposed Rulemaking (NPRM) that led to Amendment 61–100. This amendment aligns the paragraph numbers to agree with the 1993 structure, and continues the 1993 provision that a pilot

who completes in the same timeframe a phase of the FAA-sponsored pilot proficiency awards program (i.e., WINGS Program) in an aircraft need not accomplish a biennial flight review.

§ 61.57 Recent Flight Experience: Pilot in Command

This section currently requires that persons pass an instrument competency test in the category and class of aircraft involved. This section is amended to delete the words "and class" which were inadvertently inserted in paragraph (e)(2) in the NPRM. Although the addition of "and class" may be appropriate in other provisions, the FAA did not intend to propose that the instrument competency check be taken in specific class of aircraft. Instrument operations with various classes of the same category are not sufficiently distinct to warrant separate tests for each class.

§ 61.64 Additional Aircraft Ratings for Other Than Airline Transport Pilot Certificates (For Other Than Parts 121 and 135 Use)

This section is amended by revising paragraph (b)(2), deleting paragraph (c)(2), and renumbering paragraph (c)(3) as paragraph (c)(2). Paragraph (b)(2), as revised, will reinstate the provision that the holder of a category rating for a powered aircraft will not have to take a knowledge test for an additional category rating. Paragraph (c)(2) incorrectly required applicants for an added class rating to take a knowledge test. These revisions correct language that was used in the NPRM and Amendment 61–100, although there was no intention to propose a change in the prior rule. An additional knowledge test is unnecessary for adding a category or class rating. Where one powered category rating is already held, the practical test is sufficient to test any additional theoretical knowledge that the pilot may need for the new category or class. Section 61.64(e)(10) is amended to revise the reference to paragraph (e)(9) to read "paragraph (e)(9)(ii)," since paragraph (10) refers only to paragraph (e)(9)(ii).

§ 61.65 Instrumental Rating Requirements

Paragraph (g)(1) is revised to delete the word "any." This word was erroneously added in § 61.65(g)(1) prior to the phrase "category, class, and type aircraft that is certified for flight in instrument conditions." Allowing the use of any category, class, and type of aircraft during the practical test (e.g., a helicopter being used for an airplane instrument rating practical test) would not adequately establish the applicant's qualifications.

Further under paragraph (g)(1), the phrase "that is certified for flight in instrument conditions" should not have been added. This wording unintentionally precludes practical testing in some aircraft that may not be certified for flight into instrument meteorological conditions but which may be operated under instrument flight rules in visual meteorological conditions (i.e., the flight is not conducted in weather conditions that are less than minimums required for visual flight rules). Therefore, this wording has been deleted.

Under paragraph (g)(2) the words "required by this paragraph (g)(2)" are not needed and are therefore deleted.

§ 61.109 Airplane Rating: Aeronautical Experience

This section is amended to correct an editorial error. A typographical error that occurred when this final rule was printed rendered paragraph (f) as paragraph (h). Therefore, paragraph (h) should be redesignated as paragraph (f).

§ 61.129 Airplane Rating: Aeronautical Experience

Paragraph (b) is revised to correct an error in formatting that raised confusion as to whether the aeronautical experience provision of 100 hours of pilot time in an airplane and the provisions that break down that aeronautical experience requirement had been removed. Such a revision was not proposed and was never intended. This experience is necessary to ensure that the U.S. commercial pilot certificate meets International Civil Aviation Organization (ICAO) standards. The amended paragraph (b) avoids any confusion.

§ 61.157 Airplane Rating: Aeronautical Skill (For Parts 121 and 135 Use Only)

Paragraph (g) is revised to clarify that completion of an air carrier pilot-in-command proficiency check satisfies the requirement for demonstration of aeronautical skill only when the check is evaluated by a designated examiner or FAA inspector, and only when the check includes all maneuvers and procedures which are required for the original type rating. This has been the FAA's long standing interpretation of similar language in the flush paragraph which appears at the end of § 121.441(a), which states "The satisfactory completion of a type rating flight check under § 61.157 of this chapter satisfies the requirement for a proficiency check." The intent, that a pilot-in-command proficiency check under these conditions

satisfies the demonstration of aeronautical skill for a type rating, should be stated under § 61.157(g), not in § 121.441. Therefore, this action will also amend § 121.441 to delete that redundant flush paragraph.

§ 61.197 Renewal of Flight Instructor Certificates

Paragraph (b) is revised to reinstate Amendment 61–95 (59 FR 17644, April 13, 1994) that eliminated the requirement for 24 hours of ground and flight training for a flight instructor refresher clinic. The 24 hour requirement had been erroneously reinserted by Amendment 61–100 (61 FR 34508). The revised paragraph will also allow any authorized Flight Standards Inspector to renew a flight instructor certificate. The paragraph is also revised to state that an applicant who is an instructor or evaluator of a part 142 Training Center may renew a flight instructor certificate, without the applicant accomplishing a practical test. This addition makes explicit one kind of "comparable position involving the regular evaluation of pilots." Further, language has been added to this section explicitly stating that application for renewal must be made prior to the expiration date of a current flight instructor certificate. This always has been implied by this section.

Parts 121 and 135

§ 121.402 Training Program: Special Rules

Paragraph (a) of this section is amended by adding the word "flight" before "training, testing, and checking." Paragraph (a) was not intended to require specialized training (e.g., hazardous materials training and maintenance technician training) to be done by another certificate holder or a part 142 Training Center.

§ 121.431 Applicability

Paragraph (a)(2) is revised to change the reference from "§§ 121.411 and 121.413" to "§§ 121.411 through 121.414." Also, § 135.324 (Training Program: Special Rules) is amended by revising paragraph (b)(4) to change the reference from "§§ 135.337 or 135.339" to "§§ 135.337 through 135.340." These two sections need to be amended in order to be consistent with the June 17, 1996 Amendment Nos. 121–257 and 135–64 (61 FR 30734) that added new sections to parts 121 and 135 regarding qualifications, and initial and transition training and checking requirements for flight instructors.

Part 142

§ 142.11 Application for Issuance or Amendment

This section is amended by deleting paragraph (e)(4) and redesignating paragraph (e)(5) as paragraph (e)(4). Paragraph (e)(4), as adopted, referred to § 142.21; however, because § 142.21 was a reserved section, reference made to it under § 142.11 is erroneous.

§ 142.53 Training Center Instructor Training and Testing Requirements

This section is amended by inserting in paragraph (a)(7)(ii) the words "of a representative segment of each curriculum" This insertion is needed to preclude confusion that might result from an interpretation that instructor testing must include all maneuvers, in apparent contradiction with paragraph (a)(1), which specifies that only a representative segment of each curriculum must be checked.

Federalism Implications

The regulations do not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among various levels of government. Thus, in accordance with Executive Order 12612, it is determined that such a regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

Paperwork Reduction Act

The information collection requirements associated with this rule have already been approved. There are no further paperwork requirements associated with this correction.

Good Cause Justification for Immediate Adoption

This amendment is needed to make editorial corrections and minor clarifying revisions. Because the amendment is editorial in nature and would impose no additional burden on the public, I find that notice and opportunity for public comment before adopting this amendment is unnecessary, and that good cause exists for making this amendment effective in less than 30 days.

Conclusion

The FAA has determined that this regulation imposes no additional burden on any person. Accordingly, it has been determined that the action: (1) Is not a significant rule under Executive Order 12866; and (2) is not a significant rule under Department of Transportation Regulatory Policy and Procedures (44 FR 11034, February 26, 1979). Also, because this regulation is editorial in nature, no impact is expected to result, and a full regulatory evaluation is not required. In addition, the FAA certifies that the rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

The Amendments

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR parts 61, 121, 135, and 142 effective March 21, 1997.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

Part 135—Operating Requirements: Commuter and On-Demand Operations
Subpart A—General

§ 135.1 Applicability.

(a) [This part prescribes rules governing—

[(1) The commuter or on-demand operations of each person who holds or is required to hold an Air Carrier Certificate or Operating Certificate under part 119 of this chapter.

[(2) Each person employed or used by a certificate holder conducting operations under this part including the maintenance, preventative maintenance and alteration of an aircraft.

[(3) The transportation of mail by aircraft conducted under a postal service contract awarded under 39 U.S.C. 5402c.

[(4) Each person who applies for provisional approval of an Advanced Qualification Program curriculum, curriculum segment, or portion of a curriculum segment under SFAR No. 58 of 14 CFR part 121 and each person employed or used by an air carrier or commercial operator under this part to perform training, qualification, or evaluation functions under an Advanced Qualification Program under SFAR No. 58 of 14 CFR part 121.

[(5) Nonstop sightseeing flights for compensation or hire that begin and end at the same airport, and are conducted within a 25 statute mile radius of that airport; however, except for operations subject to SFAR 50–2, these operations, when conducted for compensation or hire, must comply only with §§ 135.249, 135.251, 135.253, 135.255, and 135.353.

[(6) Each person who is on board an aircraft being operated under this part.

[(7) Each person who is an applicant for an Air Carrier Certificate or an Operating Certificate under 119 of this chapter, when conducting proving tests.]

(b) [Reserved]

(c) For the purpose of §§ 135.249, 135.251, 135.253, 135.255, and 135.353, *operator* means any person or entity conducting non-stop sightseeing flights for compensation or hire in an airplane or rotorcraft that begin and end at the same airport and are conducted within a 25 statute mile radius of that airport.

(d) Notwithstanding the provisions of this part and appendices I and J to part 121 of this chapter, an operator who does not hold a part 121 or part 135 certificate is permitted to use a person who is otherwise authorized to perform aircraft maintenance or preventive maintenance duties and who is not subject to FAA-approved anti-drug and alcohol misuse prevention programs to perform—

(1) Aircraft maintenance or preventive maintenance on the operator's aircraft if the operator would otherwise be required to transport the aircraft more than 50 nautical miles further than the repair point closest to the operator's principal place of operation to obtain these services; or

(2) Emergency repairs on the operator's aircraft if the aircraft cannot be safely operated to a location where an employee subject to FAA-approved programs can perform the repairs.

(Amdt. 135–5, Eff. 7/1/80); (Amdt. 135–7, Eff. 2/1/81); (Amdt. 135–20, Eff. 1/6/87); (Amdt. 135–28, Eff. 12/21/88); (Amdt. 135–32; Eff. 8/18/90); (Amdt. 135–37, Eff. 10/1/90); (Amdt. 135–40, Eff. 10/5/91); (Amdt. 135–48, Eff. 3/17/94); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.2 Compliance schedule for operators that transition to part 121 of this chapter; certain new entrant operators.

(a) *Applicability.* This section applies to the following:

(1) Each certificate holder that was issued an air carrier or operating certificate and operations specifications under the requirements of part 135 of this chapter or under SFAR No. 38–2 of 14 CFR part 121 before January 19, 1996, and that conducts scheduled passenger-carrying operations with:

(i) Nontransport category turbopropeller-powered airplanes type certificated after December 31, 1964, that have a passenger seat configuration of 10–19 seats;

(ii) Transport category turbopropeller-powered airplanes that have a passenger seat configuration of 20–30 seats; or

(iii) Turbojet-engine-powered airplanes having a passenger seat configuration of 1–30 seats.

(2) Each person who, after January 19, 1996, applies for or obtains an initial air carrier or operating certificate and operations specifications to conduct scheduled passenger-carrying operations in the kinds of airplanes described in paragraphs (a)(1)(i), (a)(1)(ii), or paragraph (a)(1)(iii) of this section.

(b) *Obtaining operations specifications.* A certificate holder described in paragraph (a)(1) of this section may not, after March 20, 1997, operate an airplane described in paragraphs (a)(1)(i), (a)(1)(ii), or (a)(1)(iii) of this section in scheduled passenger-carrying operations, unless it obtains operations specifications to conduct its scheduled operations under part 121 of this chapter on or before March 20, 1997.

(c) *Regular or accelerated compliance.* Except as provided in paragraphs (d) and (e) of this section, each certificate holder described in paragraph (a)(1) of this section shall comply with each applicable requirement of part 121 of this chapter on and after March 20, 1997, or on and after the date on which the certificate holder is issued operations specifications under this part, whichever occurs first. Except as provided in paragraphs (d) and (e) of this section, each person described in paragraph (a)(2) of this section shall comply with each applicable requirement of part 121 of this chapter on and after the date on which that person is issued a certificate and operations specifications under part 121 of this chapter.

(d) *Delayed compliance dates.* Unless paragraph (e) of this section specifies an earlier compliance date, no certificate holder that is covered by paragraph (a) of this section may operate an airplane in 14 CFR part 121 operations on or after a date listed in this paragraph unless that airplane meets the applicable requirement of this paragraph:

(1) *Nontransport category turbopropeller-powered airplanes type certificated after December 31, 1964, that have a passenger seat configuration of 10–19 seats.* No certificate holder may operate under this part an airplane that is described in paragraph (a)(1)(i) of this section on or after a date listed in paragraph (d)(1) of this section unless that airplane meets the applicable requirement listed in paragraph (d)(1) of this section:

(i) December [20], 1997:

(A) Section 121.289, Landing gear aural warning.

(B) Section 121.308, Lavatory fire protection.

(C) Section 121.310(e), Emergency exit handle illumination.

(D) Section 121.337(b)(8), Protective breathing equipment.

(E) Section 121.340, Emergency flotation means.

(ii) December 20, 1999: Section 121.342, Pitot heat indication system.

(iii) December 20, 2010:

[(iv) March 12, 1999: Section 121.310(b)(1), Interior emergency exit locating sign.]

(A) For airplanes described in § 121.157(f), the Airplane Performance Operating Limitations in §§ 121.189 through 121.197.

(B) Section 121.161(b), Ditching approval.

(C) Section 121.305(j), Third attitude indicator.

(D) Section 121.312(c), Passenger seat cushion flammability.

(2) *Transport category turbopropeller-powered airplanes that have a passenger seat configuration of 20–30 seats.* No certificate holder may operate under this part an airplane that is described in paragraph (a)(1)(ii) of this section on or after a date listed in paragraph (d)(2) of this section unless that airplane meets the applicable requirement listed in paragraph (d)(2) of this section:

(i) December [20], 1997:

(A) Section 121.308, Lavatory fire protection.

(B) Section 121.337(b)(8) and (9), Protective breathing equipment.

(C) Section 121.340, Emergency flotation means.

(ii) December 20, 2010: Section 121.305(j), Third attitude indicator.

(e) *Newly manufactured airplanes.* No certificate holder that is described in paragraph (a) of this section may operate under part 121 of this chapter an airplane manufactured on or after a date listed in this paragraph unless that airplane meets the applicable requirement listed in this paragraph.

(1) For nontransport category turbopropeller-powered airplanes type certificated after December 31, 1964, that have a passenger seat configuration of 10–19 seats:

(i) Manufactured on or after March 20, 1997:

(A) Section 121.305(j), Third attitude indicator.

(B) Section 121.311(f), Safety belts and shoulder harnesses.

(ii) Manufactured on or after December [20], 1997: Section 121.317(a), Fasten seat belt light.

(iii) Manufactured on or after December 20, 1999: Section 121.293, Takeoff warning system.

[(iv) Manufactured on or after March 12, 1999: Section 121.310(b)(1), Interior emergency exit locating sign.]

(2) For transport category turbopropeller-powered airplanes that have a passenger seat configuration of 20–30 seats manufactured on or after March 20, 1997: Section 121.305(j), Third attitude indicator.

(f) *New type certification requirements.* No person may operate an airplane for which the application for a type certificate was filed after March 29, 1995, in 14 CFR part 121 operations unless that airplane is type certificated under part 25 of this chapter.

(g) *Transition plan.* Before March 19, 1996, each certificate holder described in paragraph (a)(1) of this section must submit to the FAA a transition plan (containing a calendar of events) for moving from conducting its scheduled operations under the commuter requirements of part 135 of this chapter to the requirements for domestic or flag operations under part 121 of this chapter. Each transition plan must contain details on the following:

(1) Plans for obtaining new operations specifications authorizing domestic or flag operations;

(2) Plans for being in compliance with the applicable requirements of part 121 of this chapter on or before March 20, 1997; and

(3) Plans for complying with the compliance date schedules contained in paragraphs (d) and (e) of this section.

(Amdt. 135–58, Eff. 1/19/96); (Amdt. 135–65, Eff. 7/15/96); [(Amdt. 135–66, Eff. 3/12/97)]

§ 135.3 Rules applicable to operations subject to this part.

(a) Each person operating an aircraft in operations under this part shall—

(1) While operating inside the United States, comply with the applicable rules of this chapter; and

(2) While operating outside the United States, comply with Annex 2, Rules of the Air, to the Convention on International Civil Aviation or the regulations of any foreign country, whichever applies, and with any rules of parts 61 and 91 of this chapter and this part that are more restrictive than that Annex or those regulations and that can be complied with without violating that Annex or those regulations. Annex 2 is incorporated by reference in § 91.703(b) of this chapter.

(b) [After March 19, 1997, each certificate holder that conducts commuter operations under this part with airplanes in which two pilots are required by the type certification rules of this chapter shall comply with subparts N and O of part 121 of this chapter instead of the requirements of subparts E, G, and H of this part.] Each affected certificate holder must submit to the Administrator and obtain approval of a transition plan (containing a calendar of events) for moving from its present part 135 training, checking, testing, and qualification requirements to the requirements of part 121 of this chapter. Each transition plan must be submitted by March 19, 1996, and must contain details on how the certificate holder plans to be in compliance with subparts N and O of part 121 on or before March 19, 1997.

(c) If authorized by the Administrator upon application, each certificate holder that conducts operations under this part to which paragraph (b) of this section does not apply, may comply with the applicable sections of subparts N and O of part 121 instead of the requirements of subparts E, G, and H of this part, except that those authorized certificate holders may choose to comply with the operating experience requirements of § 135.244, instead of the requirements of § 121.434 of this chapter.

(Amdt. 135–32, Eff. 8/18/90); (Amdt. 135–57, Eff. 3/19/96); [(Amdt. 135–65, Eff. 7/15/96)]

§ 135.5 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.7 Applicability of rules to unauthorized operators.

The rules in this part which apply to a person certificated under [part 119 of this chapter] also apply to a person who engages in any operation governed by this part without an appropriate certifi-

cate and operations specifications required by [part 119 of this chapter].

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.9 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.10 [Removed]

Docket No. 19110 (53 FR 37697) Eff. 9/27/88; (Amdt 135–1, Eff. 5/7/79) (Amdt. 135–6, Eff. 9/10/80); (Amdt. 135–9, Eff. 12/1/80) (Amdt. 135–13, Eff. 5/19/81); (Amdt. 135–27, Eff. 1/2/89); [(Amdt. 135–60, Eff. 2/26/96)]

§ 135.11 [Removed]

(Amdt. 135–24, Eff. 8/25/87); [(Amdt. 135–58, Eff. 1/19/96)]

[§ 135.12 Previously trained crewmembers.

[A certificate holder may use a crewmember who received the certificate holder's training in accordance with subparts E, G, and H of this part before March 19, 1997, without complying with initial training and qualification requirements of subparts N and O of part 121 of this chapter. The crewmember must comply with the applicable recurrent training requirements of part 121 of this chapter.]

[(Amdt. 135–57, Eff. 3/19/96)]

§ 135.13 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.15 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.17 [Removed]

(Amdt. 135–6, Eff. 9/10/80) (Amdt. 135–33, Eff. 10/25/89); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.19 Emergency operations.

(a) In an emergency involving the safety of persons or property, the certificate holder may deviate from the rules of this part relating to aircraft and equipment and weather minimums to the extent required to meet that emergency.

(b) In an emergency involving the safety of persons or property, the pilot in command may deviate from the rules of this part to the extent required to meet that emergency.

(c) Each person who, under the authority of this section, deviates from a rule of this part shall, within 10 days, excluding Saturdays, Sundays, and Federal holidays, after the deviation, send to the FAA Flight Standards District Office charged with the overall inspection of the certificate holder a complete report of the aircraft operation involved, including a description of the deviation and reasons for it.

§ 135.21 Manual requirements.

(a) Each certificate holder, other than one who uses only one pilot in the certificate holder's operations, shall prepare and keep current a manual setting forth the certificate holder's procedures and policies acceptable to the Administrator. This manual must be used by the certificate holder's flight, ground, and maintenance personnel in conducting its operations. However, the Administrator may authorize a deviation from this paragraph if the Administrator finds that, because of the limited size of the operation, all or part of the manual is not necessary for guidance of flight, ground, or maintenance personnel.

(b) Each certificate holder shall maintain at least one copy of the manual at its principal base of operations.

(c) The manual must not be contrary to any applicable Federal regulations, foreign regulation applicable to the certificate holder's operations in foreign countries, or the certificate holder's operating certificate or operations specifications.

(d) A copy of the manual, or appropriate portions of the manual (and changes and additions) shall be made available to maintenance and ground operations personnel by the certificate holder and furnished to—

(1) Its flight crewmembers; and

(2) Representatives of the Administrator assigned to the certificate holder.

(e) Each employee of the certificate holder to whom a manual or appropriate portions of it are furnished under paragraph (d)(1) of this section shall keep it up to date with the changes and additions furnished to them.

(f) [For the purpose of complying with paragraph (d) of this section, a certificate holder may furnish the persons listed therein with the maintenance part of its manual in printed form or other form, acceptable to the Administrator, that is retrievable in the English language. If the certificate holder furnishes the maintenance part of the manual in other than printed form, it must ensure there is a compatible reading device available to those persons that pro-

vide a legible image of the maintenance information and instructions, or a system that is able to retrieve the maintenance information and instructions in the English language.]

(g) If a certificate holder conducts aircraft inspections or maintenance at specified stations where it keeps the approved inspection program manual, it is not required to carry the manual aboard the aircraft en route to those stations.

(Amdt. 135–18, Eff. 8/2/82); (Amdt. 135–58, Eff. 1/19/96); [(Amdt. 135–66, Eff. 3/12/97)]

§ 135.23 Manual contents.

Each manual shall have the date of the last revision on each revised page. The manual must include—

(a) The name of each management person required under [§ 119.69(a) of this chapter] who is authorized to act for the certificate holder, the person's assigned area of responsibility, the person's duties, responsibilities, and authority, and the name and title of each person authorized to exercise operational control under § 135.77;

(b) Procedures for ensuring compliance with aircraft weight and balance limitations and, for multiengine aircraft, for determining compliance with § 135.185;

(c) Copies of the certificate holder's operations specifications or appropriate extracted information, including area of operations authorized, category and class of aircraft authorized, crew complements, and types of operations authorized;

(d) Procedures for complying with accident notification requirements.

(e) Procedures for ensuring that the pilot in command knows that required airworthiness inspections have been made and that the aircraft has been approved for return to service in compliance with applicable maintenance requirements;

(f) Procedures for reporting and recording mechanical irregularities that come to the attention of the pilot in command before, during, and after completion of a flight;

(g) Procedures to be followed by the pilot in command for determining that mechanical irregularities or defects reported for previous flights have been corrected or that correction has been deferred;

(h) Procedures to be followed by the pilot in command to obtain maintenance, preventive maintenance, and servicing of the aircraft at a place where previous arrangements have not been made by the operator, when the pilot is authorized to so act for the operator;

(i) Procedures under § 135.179 for the release for, or continuation of, flight if any item of equipment required for the particular type of operation becomes inoperative or unserviceable en route;

(j) Procedures for refueling aircraft, eliminating fuel contamination, protecting from fire (including electrostatic protection), and supervising and protecting passengers during refueling;

(k) Procedures to be followed by the pilot in command in the briefing under § 135.117;

(l) Flight locating procedures, when applicable;

(m) Procedures for ensuring compliance with emergency procedures, including a list of the functions assigned each category of required crewmembers in connection with an emergency and emergency evacuation duties under § 135.123;

(n) En route qualification procedures for pilots, when applicable;

(o) The approved aircraft inspection program, when applicable;

(p) Procedures and instructions to enable personnel to recognize hazardous materials, as defined in Title 49 CFR, and if these materials are to be carried, stored, or handled, procedures and instructions for—

(1) Accepting shipment of hazardous material required by Title 49 CFR, to assure proper packaging, marking, labeling, shipping documents, compatibility of articles, and instructions on their loading, storage, and handling;

(2) Notification and reporting hazardous material incidents as required by Title 49 CFR; and

(3) Notification of the pilot in command when there are hazardous materials aboard, as required by Title 49 CFR;

(q) Procedures for the evacuation of persons who may need the assistance of another person to move expeditiously to an exit if an emergency occurs; and

(r) Other procedures and policy instructions regarding the certificate holder's operations, that are issued by the certificate holder.

(Amdt. 135–20, Eff. 1/6/87); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.25 Aircraft requirements.

(a) Except as provided in paragraph (d) of this section, no certificate holder may operate an aircraft under this part unless that aircraft—

(1) Is registered as a civil aircraft of the United States and carries an appropriate and current airworthiness certificate issued under this chapter; and

(2) Is in an airworthy condition and meets the applicable airworthiness requirements of this chapter, including those relating to identification and equipment.

(b) Each certificate holder must have the exclusive use of at least one aircraft that meets the requirements for at least one kind of operation authorized in the certificate holder's operations specifications. In addition, for each kind of operation for which the certificate holder does not have the exclusive use of an aircraft, the certificate holder must have available for use under a written agreement (including arrangements for performing required maintenance) at least one aircraft that meets the requirements for that kind of operation. However, this paragraph does not prohibit the operator from using or authorizing the use of the aircraft for other than [operations under this part] and does not require the certificate holder to have exclusive use of all aircraft that the certificate holder uses.

(c) For the purposes of paragraph (b) of this section, a person has exclusive use of an aircraft if that person has the sole possession, control, and use of it for flight, as owner, or has a written agreement (including arrangements for performing required maintenance), in effect when the aircraft is operated, giving the person that possession, control, and use for at least 6 consecutive months.

(d) A certificate holder may operate in common carriage, and for the carriage of mail, a civil aircraft which is leased or chartered to it without crew and is registered in a country which is a party to the Convention on International Civil Aviation if—

(1) The aircraft carries an appropriate airworthiness certificate issued by the country of registration and meets the registration and identification requirements of that country;

(2) The aircraft is of a type design which is approved under a U.S. type certificate and complies with all of the requirements of this chapter (14 CFR Chapter 1) that would be applicable to that aircraft were it registered in the United States, including the requirements which must be met for issuance of a U.S. standard airworthiness certificate (including type design conformity, condition for safe operation, and the noise, fuel venting, and engine emission requirements of this chapter), except that a U.S. registration certificate and a U.S. standard airworthiness certificate will not be issued for the aircraft;

(3) The aircraft is operated by U.S.-certificated airmen employed by the certificate holder; and

(4) The certificate holder files a copy of the aircraft lease or charter agreement with the FAA Aircraft Registry, Department of Transportation, 6400 South MacArthur Boulevard, Oklahoma City, OK (Mailing address: P.O. Box 25504, Oklahoma City, OK 73125).

(Amdt. 135–8, Eff. 10/16/80); [(Amdt. 135–66, Eff. 3/12/97)]

§ 135.27 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.29 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.31 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.33 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.35 [Removed]

[(Amdt. 135–58, Eff. 1/19/96)]

§ 135.37 [Removed]

(Amdt 135–18, Eff. 8/2/82); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.39 [Removed]

(Amdt 135–6, Eff. 9/10/80); (Amdt. 135–18, Eff. 8/2/82); (Amdt 135–20, Eff. 1/6/87); (Amdt. 135–33, Eff. 10/25/89); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.41 Carriage of narcotic drugs, marihuana, and depressant or stimulant drugs or substances.

[If the holder of a certificate operating under this part allows any aircraft owned or leased by that holder to be engaged in any operation that the certificate holder knows to be in violation of § 91.19(a) of this chapter, that operation is a basis for suspending or revoking the certificate.]

(Amdt 135–32, Eff. 8/18/90); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.43 [Crewmember certificates: International operations.]

(a) [This section describes the certificates that were issued to United States citizens who were employed by air carriers at the time of issuance

as flight crewmembers on United States registered aircraft engaged in international air commerce. The purpose of the certificate is to facilitate the entry and clearance of those crewmembers into ICAO contracting states. They were issued under Annex 9, as amended, to the Convention on International Civil Aviation.

(b) [The holder of a certificate issued under this section, or the air carrier by whom the holder is employed, shall surrender the certificate for cancellation at the nearest FAA Flight Standards District Office at the termination of the holder's employment with that air carrier.]

(Amdt. 135–58, Eff. 1/19/96); [(Amdt. 135–65, Eff. 7/15/96)]

Subpart B—Flight Operations

§ 135.61 General.

This subpart prescribes rules, in addition to those in part 91 of this chapter, that apply to operations under this part.

§ 135.63 Recordkeeping requirements.

(a) Each certificate holder shall keep at its principal business office or at other places approved by the Administrator, and shall make available for inspection by the Administrator the following—

(1) The certificate holder's operating certificate;

(2) The certificate holder's operations specifications;

(3) [A current list of the aircraft used or available for use in operations under this part and the operations for which each is equipped;]

(4) An individual record of each pilot used in operations under this part, including the following information:

(i) The full name of the pilot.

(ii) The pilot certificate (by type and number) and ratings that the pilot holds.

(iii) The pilot's aeronautical experience in sufficient detail to determine the pilot's qualifications to pilot aircraft in operation under this part.

(iv) The pilot's current duties and the date of the pilot's assignment to those duties.

(v) The effective date and class of the medical certificate that the pilot holds.

(vi) The date and result of each of the initial and recurrent competency tests and proficiency and route checks required by this part and the type of aircraft flown during that test or check.

(vii) The pilot's flight time in sufficient detail to determine compliance with the flight time limitations of this part.

(viii) The pilot's check pilot authorization, if any.

(ix) Any reaction taken concerning the pilot's release from employment for physical or professional disqualification.

(x) [The date of the completion of the initial phase and each recurrent phase of the training required by this part; and

[(5) An individual record for each flight attendant who is required under this part, maintained in sufficient detail to determine compliance with the applicable portions of § 135.273 of this part.]

(b) [Each certificate holder must keep each record required by paragraph (a)(3) of this section for at least 6 months, and must keep each record required by paragraphs (a)(4) and (a)(5) of this section for at least 12 months.]

(c) For multiengine aircraft, each certificate holder is responsible for the preparation and accuracy of a load manifest in duplicate containing information concerning the loading of the aircraft. The manifest must be prepared before each takeoff and must include—

(1) The number of passengers;

(2) The total weight of the loaded aircraft;

(3) The maximum allowable takeoff weight for that flight;

(4) The center of gravity limits;

(5) The center of gravity of the loaded aircraft, except that the actual center of gravity need not be computed if the aircraft is loaded according to a loading schedule or other approved method that ensures that the center of gravity of the loaded aircraft is within approved limits. In those cases, an entry shall be made on the manifest indicating that the center of gravity is within limits according to a loading schedule or other approved method;

(6) The registration number of the aircraft or flight number;

(7) The origin and destination; and

(8) Identification of crewmembers and their crew position assignments.

(d) The pilot in command of the aircraft for which a load manifest must be prepared shall carry a copy of the completed load manifest in the aircraft to its destination. The certificate holder shall keep copies of completed load manifest for at least 30 days at its principal operations base, or at

another location used by it and approved by the Administrator.

[(Amdt. 135–52, Eff. 11/18/94)]

§ 135.64 Retention of contracts and amendments: Commercial operators who conduct intrastate operations for compensation or hire.

[Each commercial operator who conducts intrastate operations for compensation or hire shall keep a copy of each written contract under which it provides services as a commercial operator for a period of at least one year after the date of execution of the contract. In the case of an oral contract, it shall keep a memorandum stating its elements, and of any amendments to it, for a period of at least one year after the execution of that contract or change.]

(Amdt. 135–58, Eff. 1/19/96); (Amdt. 135–65, Eff. 7/15/96); [(Amdt. 135–66, Eff. 3/12/97)]

§ 135.65 Reporting mechanical irregularities.

(a) Each certificate holder shall provide an aircraft maintenance log to be carried on board each aircraft for recording or deferring mechanical irregularities and their correction.

(b) The pilot in command shall enter or have entered in the aircraft maintenance log each mechanical irregularity that comes to the pilot's attention during flight time. Before each flight, the pilot in command shall, if the pilot does not already know, determine the status of each irregularity entered in the maintenance log at the end of the preceding flight.

(c) Each person who takes corrective action or defers action concerning a reported or observed failure or malfunction of an airframe, powerplant, propeller, rotor, or appliance, shall record the action taken in the aircraft maintenance log under the applicable maintenance requirements of this chapter.

(d) Each certificate holder shall establish a procedure for keeping copies of the aircraft maintenance log required by this section in the aircraft for access by appropriate personnel and shall include that procedure in the manual required by § 135.21.

§ 135.67 Reporting potentially hazardous meteorological conditions and irregularities of communications or navigation facilities.

Whenever a pilot encounters a potentially hazardous meteorological condition or an irregularity in a ground communications or navigational facility in flight, the knowledge of which the pilot considers essential to the safety of other flights, the pilot shall notify an appropriate ground radio station as soon as practicable.

(Amdt. 135–1, Eff. 5/7/79)

§ 135.69 Restriction or suspension of operations: Continuation of flight in an emergency.

(a) During operations under this part, if a certificate holder or pilot in command knows of conditions, including airport and runway conditions, that are a hazard to safe operations, the certificate holder or pilot in command, as the case may be, shall restrict or suspend operations as necessary until those conditions are corrected.

(b) No pilot in command may allow a flight to continue toward any airport of intended landing under the conditions set forth in paragraph (a) of this section, unless in the opinion of the pilot in command, the conditions that are a hazard to safe operations may reasonably be expected to be corrected by the estimated time of arrival or, unless there is no safer procedure. In the latter event, the continuation toward that airport is an emergency situation under § 135.19.

§ 135.71 Airworthiness check.

The pilot in command may not begin a flight unless the pilot determines that the airworthiness inspections required by § 91.409 of this chapter, or § 135.419, whichever is applicable, have been made.

(Amdt. 135–32, Eff. 8/18/90)

§ 135.73 Inspections and tests.

Each certificate holder and each person employed by the certificate holder shall allow the Administrator, at any time or place, to make inspections or tests (including en route inspections) to determine the holder's compliance with the Federal Aviation Act of 1958, applicable regulations, and the certificate holder's operating certificate, and operations specifications.

§ 135.75 Inspectors credentials: Admission to pilots' compartment: Forward observer's seat.

(a) Whenever, in performing the duties of conducting an inspection, an FAA inspector presents an Aviation Safety Inspector credential, FAA Form 110A, to the pilot in command of an aircraft

operated by the certificate holder, the inspector must be given free and uninterrupted access to the pilot compartment of that aircraft. However, this paragraph does not limit the emergency authority of the pilot in command to exclude any person from the pilot compartment in the interest of safety.

(b) A forward observer's seat on the flight deck, or forward passenger seat with headset or speaker must be provided for use by the Administrator while conducting en route inspections. The suitability of the location of the seat and the headset or speaker for use in conducting en route inspections is determined by the Administrator.

§ 135.77 Responsibility for operational control.

Each certificate holder is responsible for operational control and shall list, in the manual required by § 135.21, the name and title of each person authorized by it to exercise operational control.

§ 135.79 Flight locating requirements.

(a) Each certificate holder must have procedures established for locating each flight, for which an FAA flight plan is not filed, that—

(1) Provide the certificate holder with at least the information required to be included in a VFR flight plan;

(2) Provide for timely notification of an FAA facility or search and rescue facility, if an aircraft is overdue or missing; and

(3) Provide the certificate holder with the location, date, and estimated time for reestablishing radio or telephone communications, if the flight will operate in an area where communications cannot be maintained.

(b) Flight locating information shall be retained at the certificate holder's principal place of business, or at other places designated by the certificate holder in the flight locating procedures, until the completion of the flight.

(c) Each certificate holder shall furnish the representative of the Administrator assigned to it with a copy of its flight locating procedures and any changes or additions, unless those procedures are included in a manual required under this part.

§ 135.81 Informing personnel of operational information and appropriate changes.

Each certificate holder shall inform each person in its employment of the operations specifications that apply to that person's duties and responsibilities and shall make available to each pilot in the certificate holder's employ the following materials in current form:

(a) Airman's Information Manual (Alaska Supplement in Alaska and Pacific Chart Supplement in Pacific-Asia Regions) or a commercial publication that contains the same information.

(b) This part and part 91 of this chapter.

(c) Aircraft Equipment Manuals, and Aircraft Flight Manual or equivalent.

(d) For foreign operations, the International Flight Information Manual or a commercial publication that contains the same information concerning the pertinent operational and entry requirements of the foreign country or countries involved.

§ 135.83 Operating information required.

(a) The operator of an aircraft must provide the following materials, in current and appropriate form, accessible to the pilot at the pilot station, and the pilot shall use them:

(1) A cockpit checklist.

(2) For multiengine aircraft or for aircraft with retractable landing gear, an emergency cockpit checklist containing the procedures required by paragraph (c) of this section, as appropriate.

(3) Pertinent aeronautical charts.

(4) For IFR operations, each pertinent navigational en route, terminal area, and approach and letdown chart.

(5) For multiengine aircraft, one-engine-inoperative climb performance data and if the aircraft is approved for use in IFR or over-the-top operations, that data must be sufficient to enable the pilot to determine compliance with § 135.181(a)(2).

(b) Each cockpit checklist required by paragraph (a)(1) of this section must contain the following procedures:

(1) Before starting engines;

(2) Before takeoff;

(3) Cruise;

(4) Before landing;

(5) After landing;

(6) Stopping engines.

(c) Each emergency cockpit checklist required by paragraph (a)(2) of this section must contain the following procedures as appropriate:

(1) Emergency operation of fuel, hydraulic, electrical, and mechanical systems.

(2) Emergency operation of instruments and controls.

(3) Engine inoperative procedures.

(4) Any other emergency procedures necessary for safety.

§ 135.85 Carriage of persons without compliance with the passenger-carrying provisions of this part.

The following persons may be carried aboard an aircraft without complying with the passenger-carrying requirements of this part:

(a) A crewmember or other employee of the certificate holder.

(b) A person necessary for the safe handling of animals on the aircraft.

(c) A person necessary for the safe handling of hazardous materials (as defined in Subchapter C of Title 49 CFR).

(d) A person performing duty as a security or honor guard accompanying a shipment made by or under the authority of the U.S. Government.

(e) A military courier or a military route supervisor carried by a military cargo contract, air carrier or commercial operator in operations under a military cargo contract, if that carriage is specifically authorized by the appropriate military service.

(f) An authorized representative of the Administrator conducting an en route inspection.

(g) A person, authorized by the Administrator, who is performing a duty connected with a cargo operation of the certificate holder.

§ 135.87 Carriage of cargo including carry-on baggage.

No person may carry cargo, including carry-on baggage, in or on any aircraft unless—

(a) It is carried in an approved cargo rack, bin, or compartment installed in or on the aircraft;

(b) It is secured by an approved means; or

(c) It is carried in accordance with each of the following:

(1) For cargo, it is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions, or for carry-on baggage, it is restrained so as to prevent its movement during air turbulence.

(2) It is packaged or covered to avoid possible injury to occupants.

(3) It does not impose any load on seats or on the floor structure that exceeds the load limitation for those components.

(4) It is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or located in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided.

(5) It is not carried directly above seated occupants.

(6) It is stowed in compliance with this section for takeoff and landing.

(7) For cargo only operations, paragraph (c)(4) of this section does not apply if the cargo is loaded so that at least one emergency or regular exit is available to provide all occupants of the aircraft a means of unobstructed exit from the aircraft if an emergency occurs.

(d) Each passenger seat under which baggage is stowed shall be fitted with a means to prevent articles of baggage stowed under it from sliding under crash impacts severe enough to induce the ultimate inertia forces specified in the emergency landing condition regulations under which the aircraft was type certificated.

(e) When cargo is carried in cargo compartments that are designed to require the physical entry of a crewmember to extinguish any fire that may occur during flight, the cargo must be loaded so as to allow a crewmember to effectively reach all parts of the compartment with the contents of a hand fire extinguisher

§ 135.89 Pilot requirements: Use of oxygen.

(a) *Unpressurized aircraft.* Each pilot of an unpressurized aircraft shall use oxygen continuously when flying

(1) At altitudes above 10,000 feet through 12,000 feet MSL for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(2) Above 12,000 feet MSL.

(b) *Pressurized aircraft.*

(1) Whenever a pressurized aircraft is operated with the cabin pressure altitude more than 10,000 feet MSL, each pilot shall comply with paragraph (a) of this section.

(2) Whenever a pressurized aircraft is operated at altitudes above 25,000 feet through 35,000 feet MSL unless each pilot has an approved quick-donning type oxygen mask—

(i) At least one pilot at the controls shall wear, secured and sealed, an oxygen mask that either supplies oxygen at all times or automatically supplies oxygen whenever the cabin pressure altitude exceeds 12,000 feet MSL; and

(ii) During that flight, each other pilot on flight deck duty shall have an oxygen mask, connected to an oxygen supply, located so as to allow immediate placing of the mask on the pilot's face sealed and secured for use.

(3) Whenever a pressurized aircraft is operated at altitudes above 35,000 feet MSL, at least one pilot at the controls shall wear, secured and sealed, an oxygen mask required by paragraph (2)(i) of this paragraph.

(4) If one pilot leaves a pilot duty station of an aircraft when operating at altitudes above 25,000 feet MSL, the remaining pilot at the controls shall put on and use an approved oxygen mask until the other pilot returns to the pilot duty station of the aircraft.

§ 135.91 Oxygen for medical use by passengers.

(a) Except as provided in Paragraphs (d) and (e) of this section, no certificate holder may allow the carriage or operation of equipment for the storage, generation or dispensing of medical oxygen unless the unit to be carried is constructed so that all valves, fittings, and gauges are protected from damage during that carriage or operation and unless the following conditions are met—

(1) The equipment must be—

(i) Of an approved type or in conformity with the manufacturing, packaging, marking, labeling and maintenance requirements of Title 49 CFR parts 171, 172, and 173, except § 173.24(a)(1);

(ii) When owned by the certificate holder, maintained under the certificate holder's approved maintenance program;

(iii) Free of flammable contaminants on all exterior surfaces; and

(iv) Appropriately secured.

(2) When the oxygen is stored in the form of a liquid, the equipment must have been under the certificate holder's approved maintenance program since its purchase new or since the storage container was last purged.

(3) When the oxygen is stored in the form of a compressed gas as defined in Title 49 CFR § 173.300(a)—

(i) When owned by the certificate holder, it must be maintained under its approved maintenance program; and

(ii) The pressure in any oxygen cylinder must not exceed the rated cylinder pressure.

(4) The pilot in command must be advised when the equipment is on board, and when it is intended to be used.

(5) The equipment must be stowed, and each person using the equipment must be seated, so as not to restrict access to or use of any required emergency or regular exit, or of the aisle in the passenger compartment.

(b) No person may smoke and no certificate holder may allow any person to smoke within 10 feet of oxygen storage and dispensing equipment carried under paragraph (a) of this section.

(c) No certificate holder may allow any person other than a person trained in the use of medical oxygen equipment to connect or disconnect oxygen bottles or any other ancillary component while any passenger is aboard the aircraft.

(d) Paragraph (a)(1)(i) of this section does not apply when that equipment is furnished by a professional or medical emergency service for use on board an aircraft in a medical emergency when no other practical means of transportation (including any other properly equipped certificate holder) is reasonably available and the person carried under the medical emergency is accompanied by a person trained in the use of medical oxygen.

(e) Each certificate holder who, under the authority of paragraph (d) of this section, deviates from paragraph (a)(1)(i) of this section under a medical emergency shall, within 10 days, excluding Saturdays, Sundays, and Federal holidays, after the deviation, send to the [certificate-holding district office] a complete report of the operation involved, including a description of the deviation and the reasons for it.

[(Amdt. 135–60, Eff. 2/26/96)]

§ 135.93 Autopilot: Minimum altitudes for use.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, no person may use an autopilot at an altitude above the terrain which is less than 500 feet or less than twice the maximum altitude loss specified in the approved Aircraft Flight Manual or equivalent for a malfunction of the autopilot, whichever is higher.

(b) When using an instrument approach facility other than ILS, no person may use an autopilot at an altitude above the terrain that is less than 50 feet below the approved minimum descent altitude for that procedure, or less than twice the maximum loss specified in the approved Airplane Flight Manual or equivalent for a malfunction of the autopilot under approach conditions, whichever is higher.

(c) For ILS approaches, when reported weather conditions are less than the basic weather conditions in § 91.155 of this chapter, no person may use an autopilot with an approach coupler at an altitude above the terrain that is less than 50 feet above the terrain, or the maximum altitude loss specified in the approved Airplane Flight Manual or equivalent for the malfunction of the autopilot with approach coupler, whichever is higher.

(d) Without regard to paragraph (a), (b), or (c) of this section, the Administrator may issue operations specifications to allow the use, to touchdown, of an approved flight control guidance system with automatic capability, if—

(1) The system does not contain any altitude loss (above zero) specified in the approved Aircraft Flight Manual or equivalent for malfunction of the autopilot with approach coupler; and

(2) The Administrator finds that the use of the system to touchdown will not otherwise adversely affect the safety standards of this section.

(e) This section does not apply to the operations conducted in rotorcraft.

(Amdt. 135–32, Eff. 8/18/90)

§ 135.95 Airmen: Limitations on use of services.

No certificate holder may use the services of any person as a airman unless the person performing those services—

(a) Holds an appropriate and current airman certificate; and

(b) Is qualified, under this chapter, for the operation for which the person is to be used.

§ 135.97 Aircraft and facilities for recent flight experience.

Each certificate holder shall provide aircraft and facilities to enable each of its pilots to maintain and demonstrate the pilot's ability to conduct all operations for which the pilot is authorized.

§ 135.99 Composition of flight crew.

(a) No certificate holder may operate an aircraft with less than the minimum flight crew specified in the aircraft operating limitations or the Aircraft Flight Manual for that aircraft and required by this part for the kind of operation being conducted.

(b) No certificate holder may operate an aircraft without a second in command if that aircraft has a passenger seating configuration, excluding any pilot seat, of ten seats or more.

§ 135.100 Flight crewmember duties.

(a) No certificate holder shall require, nor may any flight crewmember perform, any duties during a critical phase of flight except those duties required for the safe operation of the aircraft. Duties such as company required calls made for such nonsafety related purposes as ordering galley supplies and confirming passenger connections, announcements made to passengers promoting the air carrier or pointing out sights of interest, and filling out company payroll and related records are not required for the safe operation of the aircraft.

(b) No flight crewmember may engage in, nor may any pilot in command permit, any activity during a critical phase of flight which could distract any flight crewmember from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties. Activities such as eating meals, engaging in nonessential conversations within the cockpit and nonessential communications between the cabin and cockpit crews, and reading publications not related to the proper conduct of the flight are not required for the safe operation of the aircraft.

(c) For the purposes of this section, critical phases of flight includes all ground operations involving taxi, takeoff and landing, and all other flight operations conducted below 10,000 feet, except cruise flight.

NOTE: Taxi is defined as "movement of an airplane under its own power on the surface of an airport."

(Amdt. 135–11, Eff. 5/18/81); (Amdt. 135–14, Eff. 6/18/81); (Amdt. 135–15, Eff. 6/11/81)

§ 135.101 Second in command required in IFR conditions.

Except as provided in §§ 135.103 and 135.105, no person may operate an aircraft carrying passengers in IFR conditions, unless there is a second in command in the aircraft.

§ 135.103 Exception to second-in-command requirement: IFR operations.

The pilot in command of an aircraft carrying passengers may conduct IFR operations without a second in command under the following conditions:

(a) A takeoff may be conducted under IFR conditions if the weather reports or forecasts, or any combination of them, indicate that the weather along the planned route of flight allows flight under VFR within 15 minutes flying time, at normal cruise speed, from the takeoff airport.

(b) En route IFR may be conducted if unforecast weather conditions below the VFR minimums of this chapter are encountered on a flight that was planned to be conducted under VFR.

(c) An IFR approach may be conducted if, upon arrival at the destination airport, unforecast weather conditions do not allow an approach to be completed under VFR.

(d) When IFR operations are conducted under this section:

(1) The aircraft must be properly equipped for IFR operations under this part.

(2) The pilot must be authorized to conduct IFR operations under this part.

(3) The flight must be conducted in accordance with an ATC IFR clearance.

IFR operations without a second in command may not be conducted under this section in an aircraft requiring a second in command under § 135.99.

§ 135.105 Exception to second-in-command requirement: Approval for use of autopilot system.

(a) Except as provided in §§ 135.99 and 135.111, unless two pilots are required by this chapter for operations under VFR, a person may operate an aircraft without a second in command, if it is equipped with an operative approved autopilot system and the use of that system is authorized by appropriate operations specifications. No certificate holder may use any person, nor may any person serve, as a pilot in command under this section of an aircraft operated [in a commuter operation, as defined in part 119 of this chapter] unless that person has at least 100 hours pilot-in-command flight time in the make and model of aircraft to be flown and has met all other applicable requirements of this part.

(b) The certificate holder may apply for an amendment of its operations specifications to authorize the use of an autopilot system in place of a second in command.

(c) The Administrator issues an amendment to the operations specifications authorizing the use of an autopilot system, in place of a second in command, if—

(1) The autopilot is capable of operating the aircraft controls to maintain flight and maneuver it about the three axes; and

(2) The certificate holder shows, to the satisfaction of the Administrator, that operations using the autopilot system can be conducted safely and in compliance with this part.

The amendment contains any conditions or limitations on the use of the autopilot system that the Administrator determines are needed in the interest of safety.

(Amdt. 135–3, Eff. 3/1/80); [(Amdt. 135–58, Eff. 1/19/96)]

§ 135.107 Flight attendant crewmember requirement.

No certificate holder may operate an aircraft that has a passenger seating configuration, excluding any pilot seat, of more than 19 unless there is a flight attendant crewmember on board the aircraft.

§ 135.109 Pilot in command or second in command: Designation required.

(a) Each certificate holder shall designate a—

(1) Pilot in command for each flight; and

(2) Second in command for each flight requiring two pilots.

(b) The pilot in command, as designated by the certificate holder, shall remain the pilot in command at all times during the flight.

§ 135.111 Second in command required in Category II operations.

No person may operate an aircraft in a Category II operation unless there is a second in command of the aircraft.

§ 135.113 Passenger occupancy of pilot seat.

No certificate holder may operate an aircraft type certificate after October 15, 1971, that has a passenger seating configuration, excluding any pilot seat, of more than eight seats if any person other than the pilot in command, a second in command, a company check airman, or an authorized representative of the Administrator, the National Transportation Safety Board, or the United States Postal Service occupies a pilot seat.

§ 135.115 Manipulation of controls.

No pilot in command may allow any person to manipulate the flight controls of an aircraft during flight conducted under this part, nor may any person manipulate the controls during such flight unless that person is—

(a) A pilot employed by the certificate holder and qualified in the airfcraft; or

(b) An authorized safety representative of the Administrator who has the permission of the pilot

in command, is qualified in the aircraft, and is checking flight operations.

§ 135.117 Briefing of passengers before flight.

(a) Before each takeoff each pilot in command of an aircraft carrying passengers shall ensure that all passengers have been orally briefed on—

(1) Smoking. [Each passenger shall be briefed on when, where, and under what conditions smoking is prohibited (including, but not limited to, any applicable requirements of part 252 of this title). This briefing shall include a statement that the Federal Aviation Regulations require passenger compliance with the lighted passenger information signs (if such signs are required), posted placards, areas designated for safety purposes as no smoking areas, and crewmember instructions with regard to these items. The briefing shall also include a statement (if the aircraft is equipped with a lavatory) that Federal law prohibits: tampering with, disabling, or destroying any smoke detector installed in an aircraft lavatory; smoking in lavatories; and, when applicable, smoking in passenger compartments.

(2) [The use of safety belts, including instructions on how to fasten and unfasten the safety belts. Each passenger shall be briefed on when, where, and under what conditions the safety belt must be fastened about that passenger. This briefing shall include a statement that the Federal Aviation Regulations require passenger compliance with lighted passenger information signs and crewmember instructions concerning the use of safety belts.]

(3) The placement of seat backs in an upright position before takeoff and landing;

(4) Location and means for opening the passenger entry door and emergency exits;

(5) Location of survival equipment;

(6) If the flight involves extended overwater operation, ditching procedures and the use of required flotation equipment;

(7) If the flight involves operations above 12,000 feet MSL, the normal and emergency use of oxygen; and

(8) Location and operation of fire extinguishers.

(b) Before each takeoff the pilot in command shall ensure that each person who may need the assistance of another person to move expeditiously to an exit if an emergency occurs and that person's attendant, if any, has received a briefing as to the procedures to be followed if an evacuation occurs. This paragraph does not apply to a person who has been given a briefing before a previous leg of a flight in the same aircraft.

(c) The oral briefing required by paragraph (a) of this section shall be given by the pilot in command or a crewmember.

(d) Notwithstanding the provisions of paragraph (c) of this section, for aircraft certificated to carry 19 passengers or less, the oral briefing required by paragraph (a) of this section shall be given by the pilot in command, a crewmember, or other qualified person designated by the certificate holder and approved by the Administrator.

(e) The oral briefing required by paragraph (a) shall be supplemented by printed cards which must be carried in the aircraft in locations convenient for the use of each passenger.

The cards must—

(1) Be appropriate for the aircraft on which they are to be used;

(2) Contain a diagram of, and method of operating, the emergency exits; and

(3) Contain other instructions necessary for the use of emergency equipment on board the aircraft.

(f) The briefing required by paragraph (a) may be delivered by means of an approved recording playback device that is audible to each passenger under normal noise levels.

(Amdt. 135–20, Eff. 1/6/87); (Amdt. 135–25, Eff. 4/23/88); [(Amdt. 135–44, Eff. 10/15/92)]

§ 135.119 Prohibition against carriage of weapons.

No person may, while on board an aircraft being operated by a certificate holder, carry on or about that person a deadly or dangerous weapon, either concealed or unconcealed. This section does not apply to—

(a) Officials or employees of a municipality or a State, or of the United States, who are authorized to carry arms; or

(b) Crewmembers and other persons authorized by the certificate holder to carry arms.

§ 135.121 Alcoholic beverages.

(a) No person may drink any alcoholic beverage aboard an aircraft unless the certificate holder operating the aircraft has served that beverage.

(b) No certificate holder may serve any alcoholic beverage to any person aboard its aircraft if that person appears to be intoxicated.

(c) No certificate holder may allow any person to board any of its aircraft if that person appears to be intoxicated.

§ 135.122 Stowage of food, beverage, and passenger service equipment during aircraft movement on the surface, takeoff, and landing.

[(a) No certificate holder may move an aircraft on the surface, take off, or land when any food, beverage, or tableware furnished by the certificate holder is located at any passenger seat.

[(b) No certificate holder may move an aircraft on the surface, take off, or land unless each food and beverage tray and seat back tray table is secured in its stowed position.

[(c) No certificate holder may permit an aircraft to move on the surface, take off, or land unless each passenger serving cart is secured in its stowed position.

[(d) Each passenger shall comply with instructions given by a crewmember with regard to compliance with this system.]

[(Amdt. 135–44, Eff. 10/15/92)]

§ 135.123 Emergency and emergency evacuation duties.

(a) Each certificate holder shall assign to each required crewmember for each type of aircraft as appropriate, the necessary functions to be performed in an emergency or in a situation requiring emergency evacuation. The certificate holder shall ensure that those functions can be practicably accomplished, and will meet any reasonably anticipated emergency including incapacitation of individual crewmembers or their inability to reach the passenger cabin because of shifting cargo in combination cargo passenger aircraft.

(b) The certificate holder shall describe in the manual required under § 135.21 the functions of each category of required crewmembers assigned under paragraph (a) of this section.

§ 135.125 Airplane security.

Certificate holders conducting operations under this part shall comply with the applicable security requirements in part 108 of this chapter.

(Amdt. 135–9, Eff. 12/1/80); (Amdt. 135–10, Eff. 4/1/81)

§ 135.127 Passenger information.

(a) No person may conduct a scheduled flight segment on which smoking is prohibited unless the "No Smoking" passenger information signs are lighted during the entire flight segment, or one or more "No Smoking" placards meeting the requirements of § 25.1541 are posted during the entire flight segment. If both the lighted signs and the placards are used, the signs must remain lighted during the entire flight segment.

Smoking is prohibited on scheduled flight segments—

(1) Between any two points within Puerto Rico, the United States Virgin Islands, the District of Columbia, or any State of the United States (other than Alaska or Hawaii) or between any two points in any one of the above-mentioned jurisdictions (other than Alaska or Hawaii);

(2) Within the State of Alaska or within the State of Hawaii; or

(3) Scheduled in the current Worldwide or North American Edition of the *Official Airline Guide* or 6 hours or less in duration and between any point listed in paragraph (a)(1) of this section and any point in Alaska or Hawaii, or between any point in Alaska and any point in Hawaii.

(b) No person may smoke while a "No Smoking" sign is lighted or while "No Smoking" placards are posted, except that the pilot in command may authorize smoking on the flight deck (if it is physically separated from the passenger compartment) except during any movement of an aircraft on the surface, takeoff, and landing.

(c) No person may smoke in any aircraft lavatory.

(d) [No] person may operate an aircraft with a lavatory equipped with a smoke detector unless there is in that lavatory a sign or placard which reads: "Federal law provides for a penalty of up to $2,000 for tampering with the smoke detector installed in this lavatory."

(e) No person may tamper with, disable, or destroy any smoke detector installed in any aircraft lavatory.

(f) On flight segments other than those described in paragraph (a) of this section, the "No Smoking" sign required by § 135.177(a)(3) of this part must be turned on during any movement of the aircraft on the surface, for each takeoff or landing, and at any other time considered necessary by the pilot in command.

(g) The passenger information requirements prescribed in § 91.517(b) and (d) of this chapter are

in addition to the requirements prescribed in this section.

(h) Each passenger shall comply with instructions given him or her by crewmembers regarding compliance with paragraphs (b), (c), and (e) of this section.

(Amdt. 135–25, Eff. 4/23/88); (Amdt. 135–35, Eff. 2/25/90); (Amdt. 135–44, Eff. 10/15/92); [(Amdt. 135–60, Eff. 2/26/96)]

§ 135.128 Use of safety belts and child restraint systems.

(a) Except as provided in this paragraph, each person on board an aircraft operated under this part shall occupy an approved seat or berth with a separate safety belt properly secured about him or her during movement on the surface, takeoff, and landing. For seaplane and float equipped rotorcraft operations during movement on the surface, the person pushing off the seaplane or rotorcraft from the dock and the person mooring the seaplane or rotorcraft at the dock are excepted from the preceding seating and safety belt requirements. A safety belt provided for the occupant of a seat may not be used by more than one person who has reached his or her second birthday. Notwithstanding the preceding requirements, a child may:

(1) [Be held by an adult who is occupying an approved seat or berth, provided the child has not reached his or her second birthday and the child does not occupy or use any restraining device; or]

(2) Notwithstanding any other requirement of this chapter, occupy an approved child restraint system furnished by the certificate holder or one of the persons described in paragraph (a)(2)(i) of this section, provided:

(i) The child is accompanied by a parent, guardian, or attendant designated by the child's parent or guardian to attend to the safety of the child during the flight;

(ii) [Except as provided in paragraph (a)(2)(ii)(D) of this section, the approved child restraint system bears one or more labels as follows:]

(A) Seats manufactured to U.S. standards between January 1, 1981, and February 25, 1985, must bear the label: "This child restraint system conforms to all applicable Federal motor vehicle safety standards."

(B) Seats manufactured to U.S. standards on or after February 26, 1985, must bear two labels:

(1) "This child restraint system conforms to all applicable Federal motor vehicle safety standards"; and

(2) "THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT" in red lettering;

(C) Seats that do not qualify under paragraphs (a)(2)(ii)(A) and (a)(2)(ii)(B) of this section must bear either a label showing approval of a foreign government or a label showing that the seat was manufactured under the standards of the United Nations;

[(D) Notwithstanding any other provision of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Standard No. 213 (49 CFR § 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and]

(iii) The certificate holder complies with the following requirements:

(A) The restraint system must be properly secured to an approved forward-facing seat or berth;

(B) The child must be properly secured in the restraint system and must not exceed the specified weight limit for the restraint system; and

(C) The restraint system must bear the appropriate label(s).

(b) [Except as provided in paragraph (b)(3), the following prohibitions apply to certificate holders:

[(1) No certificate holder may permit a child, in an aircraft, to occupy a booster-type child restraint system, a vest-type child restraint system, a harness-type child restraint system, or a lap held child restraint system during take off, landing, or movement on the surface.

[(2) Except as required in paragraph (b)(1) of this section, no certificate holder may prohibit a child, if requested by the child's parent, guardian, or designated attendant, from occupying a child restraint system furnished by the child's parent, guardian, or designated attendant provided:

[(i) The child holds a ticket for an approved seat or berth or such seat or berth is otherwise made available by the certificate holder for the child's use;

[(ii) The requirements of paragraph (a)(2)(i) are met;

[(iii) The requirements of (a)(2)(iii) are met; and

[(iv) The child restraint system has one or more of the labels described in paragraph (a)(2)(ii)(A) through paragraph (a)(2)(ii)(C).

[(3) This section does not prohibit the certificate holder from providing child restraint systems authorized by this or, consistent with safe operating practices, determining the most appropriate passenger seat location for the child restraint system.]

(Amdt. 135–44, Eff. 10/15/92); [(Amdt. 135–62, Eff. 9/3/96)]

§ 135.129 Exit seating.

(a)(1) *Applicability.* This section applies to all certificate holders operating under this part, except for on-demand operations with aircraft having 19 or fewer passenger seats and commuter operations with aircraft having 9 or fewer passenger seats.

(2) *Duty to make determination of suitability.* Each certificate holder shall determine, to the extent necessary to perform the applicable functions of paragraph (d) of this section, the suitability of each person it permits to occupy an exit seat. For the purpose of this section—

(i) *Exit seat means*—

(A) Each seat having direct access to an exit; and

(B) Each seat in a row of seats through which passengers would have to pass to gain access to an exit, from the first seat inboard of the exit to the first aisle inboard of the exit.

(ii) A passenger seat having *direct access* means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction.

(3) *Persons designated to make determination.* Each certificate holder shall make the passenger exit seating determinations required by this paragraph in a non-discriminatory manner consistent with the requirements of this section, by persons designated in the certificate holder's required operations manual.

(4) *Submission of designation for approval.* Each certificate holder shall designate the exit seats for each passenger seating configuration in its fleet in accordance with the definitions in this paragraph and submit those designations for approval as part of the procedures required to be submitted for approval under paragraphs (n) and (p) of this section.

(b) No certificate holder may seat a person in a seat affected by this section if the certificate holder determines that it is likely that the person would be unable to perform one or more of the applicable functions listed in paragraph (d) of this section because—

(1) The person lacks sufficient mobility, strength, or dexterity in both arms and hands, and both legs:

(i) To reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms;

(ii) To grasp and push, pull, turn, or otherwise manipulate those mechanisms;

(iii) To push, shove, pull, or otherwise open emergency exits;

(iv) To lift out, hold, deposit on nearby seats, or maneuver over the seatbacks to the next row objects the size and weight of over-wing window exit doors;

(v) To remove obstructions of size and weight similar over-wing exit doors;

(vi) To reach the emergency exit expeditiously;

(vii) To maintain balance while removing obstructions;

(viii) To exit expeditiously;

(ix) To stabilize an escape slide after deployment; or

(x) To assist others in getting off an escape slide;

(2) The person is less than 15 years of age or lacks the capacity to perform one or more of the applicable functions listed in paragraph (d) of this section without the assistance of an adult companion, parent, or other relative;

(3) The person lacks the ability to read and understand instructions required by this section and related to emergency evacuation provided by the certificate holder in printed or graphic form or the ability to understand oral crew commands.

(4) The person lacks sufficient visual capacity to perform one or more of the applicable functions in paragraph (d) of this section without the assistance of visual aids beyond contact lenses or eyeglasses;

(5) The person lacks sufficient aural capacity to hear and understand instructions shouted by flight attendants, without assistance beyond a hearing aid;

(6) The person lacks the ability adequately to impart information orally to other passengers; or,

(7) The person has:

(i) A condition or responsibilities, such as caring for small children, that might prevent the person from performing one or more of the applicable functions listed in paragraph (d) of this section; or

(ii) A condition that might cause the person harm if he or she performs one or more of the applicable functions listed in paragraph (d) of this section.

(c) Each passenger shall comply with instructions given by a crewmember or other authorized employee of the certificate holder implementing exit seating restrictions established in accordance with this section.

(d) Each certificate holder shall include on passenger information cards, presented in the language in which briefings and oral commands are given by the crew, at each exit seat affected by this section, information that, in the event of an emergency in which a crewmember is not available to assist, a passenger occupying an exit seat may use if called upon to perform the following functions:

(1) Locate the emergency exit;

(2) Recognize the emergency exit opening mechanism;

(3) Comprehend the instructions for operating the emergency exit;

(4) Operate the emergency exit;

(5) Assess whether opening the emergency exit will increase the hazards to which passengers may be exposed;

(6) Follow oral directions and hand signals given by a crewmember;

(7) Stow or secure the emergency exit door so that it will not impede use of the exit;

(8) Assess the conditions of an escape slide, activated the slide, and stabilize the slide after deployment to assist others in getting off the slide;

(9) Pass expeditiously through the emergency exit; and

(10) Assess, select, and follow a safe path away from the emergency exit.

(e) Each certificate holder shall include on passenger information cards, at each exit seat—

(1) In the primary language in which emergency commands are given by the crew, the selection criteria set forth in paragraph (b) of this section, and a request that a passenger identify himself or herself to allow reseating if he or she—

(i) Cannot meet the selection criteria set forth in paragraph (b) of this section;

(ii) Has a nondiscernible condition that will prevent him or her from performing the applicable functions listed in paragraph (d) of this section;

(iii) May suffer bodily harm as the result of performing one or more of those functions; or

(iv) Does not wish to perform those functions; and,

(2) In each language used by the certificate holder for passenger information cards, a request that a passenger identify himself or herself to allow reseating if he or she lacks the ability to read, speak, or understand the language or the graphic form in which instructions required by this section and related to emergency evacuation are provided by the certificate holder, or the ability to understand the specified language in which crew commands will be given in an emergency;

(3) May suffer bodily harm as the result of performing one or more of those functions; or,

(4) Does not wish to perform those functions.

A certificate holder shall not require the passenger to disclose his or her reason for needing reseating.

(f) Each certificate holder shall make available for inspection by the public at all passenger loading gates and ticket counters at each airport where it conducts passenger operations, written procedures established for making determinations in regard to exit row seating.

(g) No certificate holder may allow taxi or pushback unless at least one required crewmember has verified that no exit seat is occupied by a person the crewmember determines is likely to be unable to perform the applicable functions listed in paragraph (d) of this section.

(h) Each certificate holder shall include in its passenger briefings a reference to the passenger information cards, required by paragraphs (d) and (e), the selection criteria set forth in paragraph (b), and the functions to be performed, set forth in paragraph (d) of this section.

(i) Each certificate holder shall include in its passenger briefings a request that a passenger identify himself or herself to allow reseating if he or she—

(1) Cannot meet the selection criteria set forth in paragraph (b) of this section;

(2) Has a nondiscernible condition that will prevent him or her from performing the applicable functions listed in paragraph (d) of this section;

(3) May suffer bodily harm as the result of performing one or more of those functions; or,

(4) Does not wish to perform those functions.

A certificate holder shall not require the passenger to disclose his or her reason for needing reseating.

(j) Removed and Reserved

(k) In the event a certificate holder determines in accordance with this section that it is likely that a passenger assigned to an exit seat would be unable to perform the functions listed in paragraph (d) of this section or a passenger requests a non-exit seat, the certificate holder shall expeditiously relocate the passenger to a non-exit seat.

(l) In the event of full booking in the non-exit seats and if necessary to accommodate a passenger being relocated from an exit seat, the certificate holder shall move a passenger who is willing and able to assume the evacuation functions that may be required, to an exit seat.

(m) A certificate holder may deny transportation to any passenger under this section only because—

(1) The passenger refuses to comply with instructions given by a crewmember or other authorized employee of the certificate holder implementing exit seating restrictions established in accordance with this section, or

(2) The only seat that will physically accommodate the person's handicap is an exit seat.

(n) In order to comply with this section certificate holders shall—

(1) Establish procedures that address:

(i) The criteria listed in paragraph (b) of this section;

(ii) The functions listed in paragraph (d) of this section;

(iii) The requirements for airport information, passenger information cards, crewmember verification of appropriate seating in exit seats, passenger briefings, seat assignments, and denial of transportation as set forth in this section;

(iv) How to resolve disputes arising from implementation of this section, including identification of the certificate holder employee on the airport to whom complaints should be addressed for resolution; and,

(2) Submit their procedures for preliminary review and approval to the principal operations inspectors assigned to them at the [certificate-holding district office.]

(o) Certificate holders shall assign seats prior to boarding consistent with the criteria listed in paragraph (b) and the functions listed in paragraph (d) of this section, to the maximum extent feasible.

(p) The procedures required by paragraph (n) of this section will not become effective until final approval is granted by the Director, Flight Standards Service, Washington, DC Approval will be based solely upon the safety aspects of the certificate holder's procedures.

(Amdt. 135–36, Eff. 4/5/90); (Amdt. 135–45, Eff. 10/27/92); (Amdt. 135–50, Eff. 7/29/94); [(Amdt. 135–60, Eff. 2/26/96)]

Subpart C—Aircraft and Equipment

§ 135.141 Applicability.

This subpart prescribes aircraft and equipment requirements for operations under this part. The requirements of this subpart are in addition to the aircraft and equipment requirements of part 91 of this chapter. However, this part does not require the duplication of any equipment required by this chapter.

§ 135.143 General requirements.

(a) No person may operate an aircraft under this part unless that aircraft and its equipment meet the applicable regulations of this chapter.

(b) Except as provided in § 135.179, no person may operate an aircraft under this part unless the required instruments and equipment in it have been approved and are in an operable condition.

(c) ATC transponder equipment installed within the time periods indicated below must meet the performance and environmental requirements of the following TSO's.

(1) *Through January 1, 1992:*

(i) Any class of TSO–C74b or any class of TSO–C74c as appropriate, provided that the equipment was manufactured before January 1, 1990; or

(ii) The appropriate class of TSO–C112 (Mode S).

(2) *After January 1, 1992:* The appropriate class of TSO–C112 (Mode S). For purposes of paragraph (c)(2) of this section, "installation" does not include—

(i) Temporary installation of TSO–C74b or TSO–C74c substitute equipment, as appropriate, during maintenance of the permanent equipment;

(ii) Reinstallation of equipment after temporary removal for maintenance; or

(iii) For fleet operations, installation of equipment in a fleet aircraft after removal of the equipment for maintenance from another aircraft in the same operator's fleet.

(Amdt. 135–22, Eff. 5/26/87)

§ 135.145 Aircraft proving tests.

(a) No certificate holder may operate a turbojet airplane, or an aircraft for which two pilots are required by this chapter for operations under VFR, if it has not previously proved that aircraft or an aircraft of the same make and similar design in any operation under this part unless, in addition to the aircraft certification tests, at least 25 hours of proving tests acceptable to the Administrator have been flown by that certificate holder including—

(1) Five hours of night time, if night flights are to be authorized;

(2) Five instrument approach procedures under simulated or actual instrument weather conditions, if IFR flights are to be authorized; and

(3) Entry into a representative number of en route airports as determined by the Administrator.

(b) No certificate holder may carry passengers in an aircraft during proving tests, except those needed to make the tests and those designated by the Administrator to observe the tests. However, pilot flight training may be conducted during the proving tests.

(c) For the purposes of paragraph (a) of this section, an aircraft is not considered to be of similar design if an alteration includes—

(1) The installation of powerplants other than those of a type similar to those with which it is certificated; or

(2) Alterations to the aircraft or its components that materially affect flight characteristics.

(d) The Administrator may authorize deviations from this section if the Administrator finds that special circumstances make full compliance with this section necessary.

§ 135.147 Dual controls required.

No person may operate an aircraft in operations requiring two pilots unless it is equipped with functioning dual controls. However, if the aircraft type certification operating limitations do not require two pilots, a throwover control wheel may be used in place of two control wheels.

§ 135.149 Equipment requirements: General.

No person may operate an aircraft unless it is equipped with—

(a) A sensitive altimeter that is adjustable for barometric pressure;

(b) Heating or deicing equipment for each carburetor or, for a pressure carburetor, an alternate air source;

(c) For turbojet airplanes, in addition to two gyroscopic bank-and-pitch indicators (artificial horizons) for use at the pilot stations, a third indicator that is installed in accordance with the instrument requirements prescribed in § 121.305(j) of this chapter.

(d) [Reserved]

(e) For turbine-powered aircraft, any other equipment as the Administrator may require.

(Amdt. 135–1, Eff. 5/7/79); (Amdt. 135–34, Eff. 11/27/89); (Amdt. 135–38, Eff. 11/26/90)

§ 135.150 Public address and crewmember interphone systems.

No person may operate an aircraft having a passenger seating configuration, excluding any pilot seat, of more than 19 unless it is equipped with—

(a) A public address system which—

(1) Is capable of operation independent of the crewmember interphone system required by paragraph (b) of this section, except for handsets, headsets, microphones, selector switches, and signaling devices;

(2) Is approved in accordance with § 21.305 of this chapter;

(3) Is accessible for immediate use from each of two flight crewmember stations in the pilot compartment;

(4) For each required floor-level passenger emergency exit which has an adjacent flight attendant seat, has a microphone which is readily accessible to the seated flight attendant, except that one microphone may serve more than one exit, provided the proximity of the exits allows unassisted verbal communication between seated flight attendants;

(5) Is capable of operation within 10 seconds by a flight attendant at each of those stations in the passenger compartment from which its use is accessible;

(6) Is audible at all passenger seats, lavatories, and flight attendant seats and work stations; and

(7) For transport category airplanes manufactured on or after November 27, 1990, meets the requirements of § 25.1423 of this chapter.

(b) A crewmember interphone system which—

(1) Is capable of operation independent of the public address system required by paragraph (a) of this section, except for handsets, headsets, microphones, selector switches, and signaling devices;

(2) Is approved in accordance with § 21.305 of this chapter;

(3) Provides a means of two-way communication between the pilot compartment and—

(i) Each passenger compartment; and

(ii) Each galley located on other than the main passenger deck level;

(4) Is accessible for immediate use from each of two flight crewmember stations in the pilot compartment;

(5) Is accessible for use from at least one normal flight attendant station in each passenger compartment;

(6) Is capable of operation within 10 seconds by a flight attendant at each of those stations in each passenger compartment from which its use is accessible; and

(7) For large turbojet-powered airplanes—

(i) Is accessible for use at enough flight attendant stations so that all floor-level emergency exits (or entryways to those exits in the case of exits located within galleys) in each passenger compartment are observable from one or more of those stations so equipped;

(ii) Has an alerting system incorporating aural or visual signals for use by flight crewmembers to alert flight attendants and for use by flight attendants to alert flight crewmembers;

(iii) For the alerting system required by paragraph (b)(7)(ii) of this section, has a means for the recipient of a call to determine whether it is a normal call or an emergency call; and

(iv) When the airplane is on the ground, provides a means of two-way communication between ground personnel and either of at least two flight crewmembers in the pilot compartment. The interphone system station for use by ground personnel must be so located that personnel using the system may avoid visible detection from within the airplane.

Docket No. 24995 (54 FR 43926) Eff. 10/27/89 (Amdt. 135–34, Eff. 11/27/89)

§ 135.151 Cockpit voice recorders.

(a) [No] person may operate a multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of six or more and for which two pilots are required by certification or operating rules unless it is equipped with an approved cockpit voice recorder that:

(1) Is installed in compliance with part 23.1457(a)(1) and (2), (b), (c), (d), (e), (f), and (g); § 25.1457(a)(1) and (2), (b), (c), (d), (e), (f), and (g); § 27.1457(a)(1) and (2), (b), (c), (d), (e), (f), and (g); § 29.1457(a)(1) and (2), (b), (c), (d), (e), (f), and (g); of this chapter, as applicable; and

(2) Is operated continuously from the use of the check list before the flight to completion of the final check list at the end of the flight.

(b) [No] person may operate a multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of 20 or more seats unless it is equipped with an approved cockpit voice recorder that—

(1) Is installed in compliance with § 23.1457, § 25.1457, § 27.1457 or § 29.1457 of this chapter, as applicable; and

(2) Is operated continuously from the use of the check list before the flight to completion of the final check list at the end of the flight.

(c) In the event of an accident, or occurrence requiring immediate notification of the National Transportation Safety Board which results in termination of the flight, the certificate holder shall keep the recorded information for at least 60 days or, if requested by the Administrator or the Board, for a longer period. Information obtained from the record may be used to assist in determining the cause of accidents or occurrences in connection with investigations. The Administrator does not use the record in any civil penalty or certificate action.

(d) For those aircraft equipped to record the uninterrupted audio signals received by a boom or a mask microphone the flight crewmembers are required to use the boom microphone below 18,000 feet mean sea level. No person may operate a large turbine-engine-powered airplane manufactured after October 11, 1991, or on which a cockpit voice recorder has been installed after October 11, 1991, unless it is equipped to record the uninterrupted audio signal received by a boom or mask microphone in accordance with § 25.1457(c)(5) of this chapter.

(e) In complying with this section, an approved cockpit voice recorder having an erasure feature may be used, so that during the operation of the recorder, information:

(1) Recorded in accordance with paragraph (a) of this section and recorded more than 15 minutes earlier; or

(2) Recorded in accordance with paragraph (b) of this section and recorded more than 30 minutes earlier; may be erased or otherwise obliterated.

(Amdt. 135–23, Eff. 5/26/87); (Amdt. 135–26, Eff. 10/11/88); [(Amdt. 135–60, Eff. 2/26/96)]

§ 135.152 Flight recorders.

(a) No person may operate a multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration, excluding any pilot seat, of 10 to 19 seats, that is brought onto the U.S. register after October 11, 1991, unless it is equipped with one or more approved flight recorders that utilize a digital method of recording and storing data, and a method of readily retrieving that data from the storage medium. The parameters specified in appendix B or C, as applicable, of this part must be recorded within the range, accuracy, resolution, and recording intervals as specified. The recorder shall retain no less than 8 hours of aircraft operation.

(b) After October 11, 1991, no person may operate a multiengine, turbine-powered airplane having a passenger seating configuration of 20 to 30 seats or a multiengine, turbine-powered rotorcraft having a passenger seating configuration of 20 or more seats unless it is equipped with one or more approved flight recorders that utilize a digital method of recording and storing data, and a method of readily retrieving that data from the storage medium. The parameters in appendix D or E of this part, as applicable, that are set forth below, must be recorded within the ranges, accuracies, resolutions, and sampling intervals as specified:

(1) Except as provided in paragraph (b)(3) of this section for aircraft type certificated before October 1, 1969, the following parameters must be recorded:

(i) Time;

(ii) Altitude;

(iii) Airspeed;

(iv) Vertical acceleration;

(v) Heading;

(vi) Time of each radio transmission to or from air traffic control;

(vii) Pitch attitude;

(viii) Roll attitude;

(ix) Longitudinal acceleration;

(x) Control column or pitch control surface position; and

(xi) Thrust of each engine.

(2) Except as provided in paragraph (b)(3) of this section for aircraft type certificated after September 30, 1969, the following parameters must be recorded:

(i) Time;

(ii) Altitude;

(iii) Airspeed;

(iv) Vertical acceleration;

(v) Heading;

(vi) Time of each radio transmission either to or from air traffic control;

(vii) Pitch attitude;

(viii) Roll attitude;

(ix) Longitudinal acceleration;

(x) Pitch trim position;

(xi) Control column or pitch control surface position;

(xii) Control wheel or lateral control surface position;

(viii) Rudder pedal or yaw control surface position;

(xiv) Thrust of each engine;

(xv) Position of each thrust reverser;

(xvi) Trailing edge flap or cockpit flap control position; and

(xvii) Leading edge flap or cockpit flap control position.

(3) For aircraft manufactured after October 11, 1991, all of the parameters listed in appendix D or E of this part, as applicable, must be recorded.

(c) Whenever a flight recorder required by this section is installed, it must be operated continuously from the instant the airplane begins the takeoff roll or the rotorcraft begins the lift-off until the airplane has completed the landing roll or the rotorcraft has landed at its destination.

(d) Except as provided in paragraph (c) of this section, and except for recorded data erased as authorized in this paragraph, each certificate holder shall keep the recorded data prescribed in paragraph (a) of this section until the aircraft has been operating for at least 8 hours of the operating time specified in paragraph (c) of this section. In addition, each certificate holder shall keep the recorded data prescribed in paragraph (b) of this section for an airplane until the airplane has been operating for at least 25 hours, and for a rotorcraft until the rotorcraft has been operating for at least 10 hours, of the operating time specified in paragraph (c) of this section. A total of 1 hour of recorded data may be erased for the purpose of testing the flight recorder or the flight recorder system. Any erasure made in accordance with this paragraph must be of the oldest recorded data accumulated at the time of testing. Except as provided in paragraph (c) of this section, no record need be kept more than 60 days.

(e) In the event of an accident or occurrence that requires that immediate notification of the National Transportation Safety Board under 49 CFR part 830 of its regulations and that results in termination of the flight, the certificate holder shall remove the recording media from the aircraft and keep the recorded data required by paragraphs (a) and (b) of this section for at least 60 days or for a longer period upon request of the Board or the Administrator.

(f) Each flight recorder required by this section must be installed in accordance with the requirements of §§ 23.1459, 25.1459, 27.1459, or 29.1459, as appropriate, of this chapter. The correlation required by paragraph (c) of §§ 23.1459, 25.1459, 27.1459, or 29.1459, as appropriate, of this chapter need be established only on one aircraft of a group of aircraft:

(1) That are of the same type;

(2) On which the flight recorder models and their installations are the same; and

(3) On which there are no differences in the type design with respect to the installation of the first pilot's instruments associated with the flight recorder. The most recent instrument calibration, including the recording medium from which this calibration is derived, and the recorder correlation must be retained by the certificate holder.

(g) Each flight recorder required by this section that records the data specified in paragraphs (a) and (b) of this section must have an approved device to assist in locating that recorder under water.

Docket No. 25530 (53 FR 26151) Eff. 7/11/88; (Amdt. 135–26, Eff. 10/11/88)

§ 135.153 Ground proximity warning system.

(a) [No person may operate a turbine-powered airplane having a passenger seat configuration of 10 seats or more, excluding any pilot seat, unless it is equipped with an approved ground proximity warning system.]

(b) [Reserved]

(b) Any airplane equipped before April 20, 1992, with an alternative system that conveys warnings of excessive closure rates with the terrain and any deviations below glide slope by visual and audible means may continue to be operated with that system until April 20, 1996, provided that—

(1) The system must have been approved by the Administrator;

(2) The system must have a means of alerting the pilot when a malfunction occurs in the system; and

(3) Procedures must have been established by the certification holder to ensure that the performance of the system can be appropriately monitored.

(c) For a system required by this section, the Airplane Flight Manual shall contain—

(1) Appropriate procedures for—

(i) The use of the equipment;

(ii) Proper flight crew action with respect to the equipment; and

(iii) Deactivation for planned abnormal and emergency conditions; and

(2) An outline of all input sources that must be operating.

(d) No person may deactivate a system required by this section except under procedures in the Airplane Flight Manual.

(e) Whenever a system required by this section is deactivated, an entry shall be made in the airplane maintenance record that includes the date and time of deactivation.

(Amdt. 135–6, Eff. 9/10/80); (Amdt. 135–33, Eff. 10/25/89); (Amdt. 135–42, Eff. 4/20/92); (Amdt. 135–60, Eff. 2/26/96); [(Amdt. 135–66, Eff. 3/12/97)]

§ 135.155 Fire extinguishers: Passenger-carrying aircraft.

No person may operate an aircraft carrying passengers unless it is equipped with hand fire extinguishers of an approved type for use in crew and passenger compartments as follows—

(a) The type and quantity of extinguishing agent must be suitable for all the kinds of fires likely to occur;

(b) At least one hand fire extinguisher must be provided and conveniently located on the flight deck for use by the flight crew; and

(c) At least one hand fire extinguisher must be conveniently located in the passenger compartment of each aircraft having a passenger seating configuration, excluding any pilot seat, of at least 10 seats but less than 31 seats.

§ 135.157 Oxygen equipment requirements.

(a) *Unpressurized aircraft.* No person may operate an unpressurized aircraft at altitudes prescribed in this section unless it is equipped with enough oxygen dispensers and oxygen to supply the pilots under § 135.89(a) and to supply, when flying—

(1) At altitudes above 10,000 feet through 15,000 feet MSL, oxygen to at least 10 percent of the occupants of the aircraft, other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(2) Above 15,000 feet MSL oxygen to each occupant of the aircraft other than the pilots.

(b) *Pressurized aircraft.* No person may operate a pressurized aircraft

(1) At altitudes above 25,000 feet MSL, unless at least a 10-minute supply of supplemental oxygen is available for each occupant of the aircraft, other than the pilots, for use when a descent is necessary due to loss of cabin pressurization; and

(2) Unless it is equipped with enough oxygen dispensers and oxygen to comply with paragraph (a) of this section whenever the cabin pressure altitude exceeds 10,000 feet MSL and, if the cabin pressurization fails, to comply with § 135.89(a) or to provide a 2-hour supply for each pilot, whichever is greater, and to supply when flying—

(i) At altitudes above 10,000 feet through 15,000 feet MSL, oxygen to at least 10 percent of the occupants of the aircraft, other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(ii) Above 15,000 feet MSL, oxygen to each occupant of the aircraft, other than the pilots, for one hour unless, at all times during flight above that altitude, the aircraft can safely descend to 15,000 feet MSL within four minutes, in which case only a 30-minute supply is required.

(c) The equipment required by this section must have a means—

(1) To enable the pilots to readily determine, in flight, the amount of oxygen available in each source of supply and whether the oxygen is being delivered to the dispensing units; or

(2) In the case of individual dispensing units, to enable each user to make those determinations

with respect to that person's oxygen supply and delivery; and

(3) To allow the pilots to use undiluted oxygen at their discretion at altitudes above 25,000 feet MSL.

§ 135.158 Pitot heat indication systems.

(a) Except as provided in paragraph (b) of this section, after April 12, 1981, no person may operate a transport category airplane equipped with a flight instrument pitot heating system unless the airplane is also equipped with an operable pitot heat indication system that complies with § 25.1326 of this chapter in effect on April 12, 1978.

(b) A certificate holder may obtain an extension of the April 12, 1981, compliance date specified in paragraph (a) of this section, but not beyond April 12, 1983, from the Director, Flight Standards Service if the certificate holder—

(1) Shows that due to circumstances beyond its control it cannot comply by the specified compliance date; and

(2) Submits by the specified compliance date a schedule for compliance, acceptable to the Director, indicating that compliance will be achieved at the earliest practicable date.

(Amdt. 135–17, Eff. 9/30/81); (Amdt. 135–33, Eff. 10/25/89)

§ 135.159 Equipment requirements: Carrying passengers under VFR at night or under VFR over-the-top conditions.

No person may operate an aircraft carrying passengers under VFR at night or under VFR over-the-top unless it is equipped with—

(a) A gyroscopic rate-of-turn indicator except on the following aircraft:

(1) Airplanes with a third attitude instrument system usable through flight attitudes of 360 degrees of pitch-and-roll and installed in accordance with the instrument requirements prescribed in § 121.3056) of this chapter.

(2) Helicopters with a third attitude instrument system usable through flight attitudes of ±80 degrees of pitch and ±120 degrees of roll and installed in accordance with § 29.1303(g) of this chapter.

(3) Helicopters with a maximum certificated takeoff weight of 6,000 pounds or less.

(b) A slip skid indicator.

(c) A gyroscopic bank-and-pitch indicator.

(d) A gyroscopic direction indicator.

(e) A generator or generators able to supply all probable combinations of continuous in-flight electrical loads for required equipment and for recharging the battery.

(f) For night flights—

(1) An anticollision light system;

(2) Instrument lights to make all instruments, switches, and gauges easily readable, the direct rays of which are shielded from the pilot's eyes; and

(3) A flashlight having at least two size "D" cells or equivalent.

(g) For the purpose of paragraph (e) of this section, a continuous in-flight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments and lights, but does not include occasional intermittent loads.

(h) Notwithstanding provisions of paragraphs (b), (c), and (d), helicopters having a maximum certificated takeoff weight of 6,000 pounds or less may be operated until January 6, 1988, under visual flight rules at night without a slip skid indicator, a gyroscopic bank-and-pitch indicator, or a gyroscopic direction indicator.

Docket No. 24550 (51 FR 40709) Eff. 11/7/86); (Amdt. 135–20, Eff. 1/6/87); (Amdt. 135–38, Eff. 11/26/90)

§ 135.161 Radio and navigational equipment: Carrying passengers under VFR at night or under VFR over-the-top.

(a) No person may operate an aircraft carrying passengers under VFR at night, or under VFR over-the-top, unless it has two-way communications equipment able, at least in flight, to transmit to, and receive from, ground facilities 25 miles away.

(b) No person may operate an aircraft carrying passengers under VFR over-the-top unless it has radio navigational equipment able to receive radio signals from the ground facilities to be used.

(c) No person may operate an airplane carrying passengers under VFR at night unless it has radio navigational equipment able to receive radio signals from the ground facilities to be used.

§ 135.163 Equipment requirements: Aircraft carrying passengers under IFR.

No person may operate an aircraft under IFR, carrying passengers, unless it has—

(a) A vertical speed indicator;

(b) A free-air temperature indicator;

(c) A heated pitot tube for each airspeed indicator;

(d) A power failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;

(e) An alternate source of static pressure for the altimeter and the airspeed and vertical speed indicators;

(f) For a single-engine aircraft, a generator or generators able to supply all probable combinations of continuous inflight electrical loads for required equipment and for recharging the battery;

(g) For multiengine aircraft, at least two generators each of which is on a separate engine, of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aircraft except that for multiengine helicopters, the two required generators may be mounted on the main rotor drive train; and

(h) Two independent sources of energy (with means of selecting either), of which at least one is an engine-drive pump or generator, each of which is able to drive all gyroscopic instruments and installed so that failure of one instrument or source does not interfere with the energy supply to the remaining instruments or the other energy source, unless, for single-engine aircraft, the rate-of-turn indicator has a source of energy separate from the bank and pitch and direction indicators. For the purpose of this paragraph, for multiengine aircraft, each engine-driven source of energy must be on a different engine.

(i) For the purpose of paragraph (f) of this section, a continuous inflight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

§ 135.165 Radio and navigational equipment: Extended overwater or IFR operations.

(a) No person may operate a turbojet airplane having a passenger seating configuration, excluding any pilot seat, of 10 seats or more, or a multiengine airplane in a commuter operation, as defined in part 119 of this chapter, under IFR or in extended overwater operations unless it has at least the following radio communication and navigational equipment appropriate to the facilities to be used which are capable of transmitting to and receiving from, at any place on the route to be flown, at least one ground facility:

(1) Two transmitters, (2) two microphones, (3) two headsets or one headset and one speaker, (4) a marker beacon receiver, (5) two independent receivers for navigation, and (6) two independent receivers for communications.

(b) No person may operate an aircraft other than that specified in paragraph (a) of this section, under IFR or in extended overwater operations unless it has at least the following radio communication and navigational equipment appropriate to the facilities to be used and which are capable of transmitting to, and receiving from, at any place on the route, at least one ground facility:

(1) A transmitter, (2) two microphones, (3) two headsets or one headset and one speaker, (4) a marker beacon receiver, (5) two independent receivers for navigation, (6) two independent receivers for communications, and (7) for extended overwater operations only, an additional transmitter.

(c) For the purpose of paragraphs (a)(5), (a)(6), (b)(5), and (b)(6) of this section, a receiver is independent if the function of any part of it does not depend on the functioning of any part of another receiver. However, a receiver that can receive both communications and navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver.

[(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, installation and use of a single long-range navigation system and a single long-range communication system, for extended overwater operations, may be authorized by the Administrator and approved in the certificate holder's operations specifications. The following are among the operational factors the Administrator may consider in granting an authorization: (1) the ability of the flightcrew to reliably fix the position of the airplane within the degree of accuracy required by ATC, (2) the length of the route being flown, and (3) the duration of the very high frequency communications gap.]

(Amdt. 135–58, Eff. 1/19/96); [(Amdt. 135–61, Eff. 2/26/96)]

§ 135.167 Emergency equipment: Extended overwater operations.

(a) No person may operate an aircraft in extended overwater operations unless it carries, installed in conspicuously marked locations easily accessible to the occupants if a ditching occurs, the following equipment:

(1) An approved life preserver equipped with an approved survivor locator light for each occupant of the aircraft. The life preserver must be easily accessible to each seated occupant.

(2) Enough approved life rafts of a rated capacity and buoyancy to accommodate the occupants of the aircraft.

(b) Each life raft required by paragraph (a) of this section must be equipped with or contain at least the following:

(1) One approved survivor locator light.

(2) One approved pyrotechnic signaling device.

(3) Either—

(i) One survival kit, appropriately equipped for the route to be flown; or

(ii) One canopy (for sail, sunshade, or rain catcher);

(iii) One radar reflector;

(iv) One life raft repair kit;

(v) One bailing bucket;

(vi) One signaling mirror;

(vii) One police whistle;

(viii) One raft knife;

(ix) One CO_2 bottle for emergency inflation;

(x) One inflation pump;

(xi) Two oars;

(xii) One 75-foot retaining line;

(xiii) One magnetic compass;

(xiv) One dye marker;

(xv) One flashlight having at least two size "D" cells or equivalent;

(xvi) A two-day supply of emergency food rations supplying at least 1,000 calories a day for each person;

(xvii) For each two persons the raft is rated to carry, two pints of water or one sea water desalting kit;

(xviii) One fishing kit; and

(xix) One book on survival appropriate for the area in which the aircraft is operated.

(c) [No person may operate an airplane in extended overwater operations unless there is attached to one of the life rafts required by paragraph (a) of this section, an approved survival type emergency locator transmitter. Batteries used in this transmitter must be replaced (or recharged, if the batteries are rechargeable) when the transmitter has been in use for more than 1 cumulative hour, or, when 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval. The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.]

(Amdt. 135–4, Eff. 9/9/80); (Amdt. 135–20, Eff. 1/6/87); [(Amdt. 135–49, Eff. 6/21/94)]

§ 135.169 Additional airworthiness requirements.

(a) [Except for commuter category airplanes, no person may operate a large airplane unless it meets the additional airworthiness requirements of §§ 121.213 through 121.283 and 121.307 of this chapter.]

(b) No person may operate a reciprocating-engine or turbopropeller-powered small airplane that has a passenger seating configuration, excluding pilot seats, of 10 seats or more unless it is type certificated—

(1) In the transport category;

(2) Before July 1, 1970, in the normal category and meets special conditions issued by the Administrator for airplanes intended for use in operations under this part;

(3) Before July 19, 1970, in the normal category and meets the additional airworthiness standards in Special Federal Aviation Regulation No. 23;

(4) In the normal category and meets the additional airworthiness standards in appendix A;

(5) In the normal category and complies with section 1.(a) of Special Federal Aviation Regulation No. 41;

(6) In the normal category and complies with section 1.(b) of Special Federal Aviation Regulation No. 41; or

(7) In the commuter category.

(c) No person may operate a small airplane with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, with a seating configuration greater than the maximum seating configuration used in that type airplane in operations under this part before August 19, 1977. This paragraph does not apply to—

(1) An airplane that is type certificated in the transport category; or

(2) An airplane that complies with—

(i) Appendix A of this part provided that its passenger seating configuration, excluding pilot seats, does not exceed 19 seats; or

(ii) Special Federal Aviation Regulation No. 41.

(d) Cargo or baggage compartments:

(1) After March 20, 1991, each Class C or D compartment, as defined in § 25.857 of part 25 of this chapter, greater than 200 cubic feet in volume in a transport category airplane type certificated after January 1, 1958, must have ceiling and sidewall panels which are constructed of:

(i) Glass fiber reinforced resin;

(ii) Materials which meet the test requirements of part 25, appendix F, part III of this chapter; or

(iii) In the case of liner installations approved prior to March 20, 1989, aluminum.

(2) For compliance with this paragraph, the term "liner" includes any design feature, such as a joint or fastener, which would affect the capability of the liner to safely contain a fire.

(Amdt. 135–2, Eff. 10/17/79); (Amdt. 135–21, Eff. 2/17/87); (Amdt. 135–31, Eff. 3/20/89); [(Amdt. 135–55, Eff. 3/6/95)]

§ 135.170 Materials for compartment interiors.

[(a) No person may operate an airplane that conforms to an amended or supplemental type certificate issued in accordance with SFAR No. 41 for a maximum certificated takeoff weight in excess of 12,500 pounds unless within one year after issuance of the initial airworthiness certificate under that SFAR, the airplane meets the compartment interior requirements set forth in § 25.853(a) in effect March 6, 1995 (formerly § 25.853(a), (b), (b–1), (b–2), and (b–3) of this chapter in effect on September 26, 1978).]

(b) [Except for commuter category airplanes and airplanes certificated under Special Federal Aviation Regulation No. 41, no person may operate a large airplane unless it meets the following additional airworthiness requirements:]*

[(1) Except for those materials covered by paragraph (b)(2) of this section, all materials in each compartment used by the crewmembers or passengers must meet the requirements of § 25.853 of this chapter in effect as follows or later amendment thereto:

[(i) Except as provided in paragraph (b)(1)(iv) of this section, each airplane with a passenger capacity of 20 or more and manufactured after August 19, 1988, but prior to August 20, 1990, must comply with the heat release rate testing provisions of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on August 20, 1986), except that the total heat release over the first 2 minutes of sample exposure rate must not exceed 100 kilowatt minutes per square meter and the peak heat release rate must not exceed 100 kilowatts per square meter.

[(ii) Each airplane with a passenger capacity of 20 or more and manufactured after August 19, 1990, must comply with the heat release rate and smoke testing provisions of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on September 26, 1988).

[(iii) Except as provided in paragraph (b)(1)(v) or (vi) of this section, each airplane for which the application for type certificate was filed prior to May 1, 1972, must comply with the provisions of § 25.853 in effect on April 30, 1972, regardless of the passenger capacity, if there is a substantially complete replacement of the cabin interior after April 30, 1972.

[(iv) Except as provided in paragraph (b)(1)(v) or (vi) of this section, each airplane for which the application for type certificate was filed after May 1, 1972, must comply with the material requirements under which the airplane was type certificated regardless of the passenger capacity if there is a substantially complete replacement of the cabin interior after that date.

[(v) Except as provided in paragraph (b)(1)(vi) of this section, each airplane that was type certificated after January 1, 1958, must comply with the heat release testing provisions of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on August 20, 1986), if there is a substantially complete replacement of the cabin interior components identified in that paragraph on or after that date, except that the total heat release over the first 2 minutes of sample exposure shall not exceed 100 kilowatt-minutes per square meter and the peak heat release rate shall not exceed 100 kilowatts per square meter.

[(vi) Each airplane that was type certificated after January 1, 1958, must comply with the heat release rate and smoke testing provisions of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on August 20, 1986), if there is a substantially complete replacement of the cabin interior components

identified in that paragraph after August 19, 1990.

[(vii) Contrary provisions of this section notwithstanding, the Manager of the Transport Airplane Directorate, Aircraft Certification Service, Federal Aviation Administration, may authorize deviation from the requirements of paragraph (b)(1)(i), (b)(1)(ii), (b)(1)(v), or (b)(1)(vi) of this section for specific components of the cabin interior that do not meet applicable flammability and smoke emission requirements, if the determination is made that special circumstances exist that make compliance impractical. Such grants of deviation will be limited to those airplanes manufactured within 1 year after the applicable date specified in this section and those airplanes in which the interior is replaced within 1 year of that date. A request for such grant of deviation must include a thorough and accurate analysis of each component subject to § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on August 20, 1986), the steps being taken to achieve compliance, and, for the few components for which timely compliance will not be achieved, credible reasons for such noncompliance.

[(viii) Contrary provisions of this section notwithstanding, galley carts and standard galley containers that do not meet the flammability and smoke emission requirements of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a–1) in effect on August 20, 1986), may be used in airplanes that must meet the requirements of paragraph (b)(1)(i), (b)(1)(ii), (b)(1)(iv), or (b)(1)(vi) of this section provided the galley carts or standard containers were manufactured prior to March 6, 1995.

[(2) For airplanes type certificated after January 1, 1958, seat cushions, except those on flight crewmember seats, in any compartment occupied by crew or passengers must comply with the requirements pertaining to fire protection of seat cushions in § 25.853(c) effective November 26, 1984.]

(Amdt. 135–2, Eff. 10/17/79); [(Amdt. 135–55, Eff. 3/6/95)]; [(Amdt. 135–56, Eff. 3/6/95)]*

§ 135.171 Shoulder harness installation at flight crewmember stations.

(a) No person may operate a turbojet aircraft or an aircraft having a passenger seating configuration, excluding any pilot seat, of 10 seats or more unless it is equipped with an approved shoulder harness installed for each flight crewmember station.

(b) Each flight crewmember occupying a station equipped with a shoulder harness must fasten the shoulder harness during takeoff and landing, except that the shoulder harness may be unfastened if the crewmember cannot perform the required duties with the shoulder harness fastened.

§ 135.173 Airborne thunderstorm detection equipment requirements.

(a) No person may operate an aircraft that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more in passenger-carrying operations, except a helicopter operating under day VFR conditions, unless the aircraft is equipped with either approved thunderstorm detection equipment or approved airborne weather radar equipment.

(b) [No] person may operate a helicopter that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more in passenger-carry operations, under night VFR when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment may reasonably be expected along the route to be flown, unless the helicopter is equipped with either approved thunderstorm detection equipment or approved airborne weather radar equipment.

(c) No person may begin a flight under IFR or night VFR conditions when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment, required by paragraph (a) or (b) of this section, may reasonably be expected along the route to be flown, unless the airborne thunderstorm detection equipment is in satisfactory operating condition.

(d) If the airborne thunderstorm detection equipment becomes inoperative en route, the aircraft must be operated under the instructions and procedures specified for that event in the manual required by § 135.21.

(e) This section does not apply to aircraft used solely within the State of Hawaii, within the State of Alaska, within that part of Canada west of longitude 130 degrees W, between latitude 70 degrees N, and latitude 53 degrees N, or during any training, test, or ferry flight.

(f) Without regard to any other provision of this part, an alternate electrical power supply is not

required for airborne thunderstorm detection equipment.

(Amdt. 135–20, Eff. 1/6/87); [(Amdt. 135–60, Eff. 2/26/96)]

§ 135.175 Airborne weather radar equipment requirements.

(a) No person may operate a large, transport category aircraft in passenger-carrying operations unless approved airborne weather radar equipment is installed in the aircraft.

(b) No person may begin a flight under IFR or night VFR conditions when current weather reports indicate that thunderstorms, or other potentially hazardous weather conditions that can be detected with airborne weather radar equipment, may reasonably be expected along the route to be flown, unless the airborne weather radar equipment required by paragraph (a) of this section is in satisfactory operating condition.

(c) If the airborne weather radar equipment becomes inoperative en route, the aircraft must be operated under the instructions and procedures specified for that event in the manual required by § 135.21.

(d) This section does not apply to aircraft used solely within the State of Hawaii, within the State of Alaska, within that part of Canada west of longitude 130 degrees W, between latitude 70 degrees N, and latitude 53 degrees N, or during any training, test, or ferry flight.

(e) Without regard to any other provision of this part, an alternate electrical power supply is not required for airborne weather radar equipment.

§ 135.177 Emergency equipment requirements for aircraft having a passenger seating configuration of more than 19 passengers.

(a) No person may operate an aircraft having a passenger seating configuration, excluding any pilot seat, of more than 19 seats unless it is equipped with the following emergency equipment:

(1) One approved first aid kit for treatment of injuries likely to occur in flight or in a minor accident, which meets the following specifications and requirements:

(i) Each first aid kit must be dust and moisture proof, and contain only materials that either meet Federal Specifications GGK–319a, as revised, or as approved by the Administrator.

(ii) Required first aid kits must be readily accessible to the cabin flight attendants.

(iii) [Except as provided in paragraph (a)(1)(iv) of this section, at time of takeoff, each first aid kit must contain at least the following or other contents approved by the Administrator:

Contents	*Quantity*
Adhesive bandage compressors, 1 in ..	16
Antiseptic swabs	20
Ammonia inhalents	10
Bandage compressors, 4 in	8
Triangular bandage compressors, 40 in	5
Arm splint, noninflatable	1
Leg splint, noninflatable	1
Roller bandage, 4 in	4
Adhesive tape, 1-in standard roll	2
Bandage scissors	1
[Protective latex gloves or equivalent nonpermeable gloves	1 pair]

[(iv) Protective latex gloves or equivalent nonpermeable gloves may be placed in the first aid kit or in a location that is readily accessible to crewmembers.]

(2) A crash axe carried so as to be accessible to the crew but inaccessible to passengers during normal operations.

(3) Signs that are visible to all occupants to notify them when smoking is prohibited and when safety belts must be fastened. The signs must be constructed so that they can be turned on during any movement of the aircraft on the surface, for each takeoff or landing, and at other times considered necessary by the pilot in command. "No smoking" signs shall be turned on when required by § 135.127.

(4) (Reserved)

(b) Each item of equipment must be inspected regularly under inspection periods established in the operations specifications to ensure its condition for continued serviceability and immediate readiness to perform its intended emergency purposes.

(Amdt. 135–25, Eff. 4/23/88); (Amdt. 135–43, Eff. 6/30/92); (Amdt. 135–44, Eff. 10/15/92); (Amdt. 135–47, Eff. 1/12/94); [(Amdt. 135–53, Eff. 12/2/94)]

§ 135.178 Additional emergency equipment.

[No person may operate an airplane having a passenger seating configuration of more than 19 seats, unless it has the additional emergency equip-

ment specified in paragraphs (a) through (l) of this section.

[(a) *Means for emergency evacuation.* Each passenger-carrying landplane emergency exit (other than over-the-wing) that is more than 6 feet from the ground, with the airplane on the ground and the landing gear extended, must have an approved means to assist the occupants in descending to the ground. The assisting means for a floor-level emergency exit must meet the requirements of § 25.809(f)(1) of this chapter in effect on April 30, 1972, except that, for any airplane for which the application for the type certificate was filed after that date, it must meet the requirements under which the airplane was type certificated. An assisting means that deploys automatically must be armed during taxiing, takeoffs, and landings; however, the Administrator may grant a deviation from the requirement of automatic deployment if he finds that the design of the exit makes compliance impractical, if the assisting means automatically erects upon deployment and, with respect to required emergency exits, if an emergency evacuation demonstration is conducted in accordance with § 121.291(a) of this chapter. This paragraph does not apply to the rear window emergency exit of Douglas DC–3 airplanes operated with fewer than 36 occupants, including crewmembers, and fewer than five exits authorized for passenger use.

[(b) *Interior emergency exit marking.* The following must be complied with for each passenger-carrying airplane:

[(1) Each passenger emergency exit, its means of access, and its means of opening must be conspicuously marked. The identity and location of each passenger emergency exit must be recognizable from a distance equal to the width of the cabin. The location of each passenger emergency exit must be indicated by a sign visible to occupants approaching along the main passenger aisle. There must be a locating sign—

[(i) Above the aisle near each over-the-wing passenger emergency exit, or at another ceiling location if it is more practical because of low headroom;

[(ii) Next to each floor level passenger emergency exit, except that one sign may serve two such exits if they both can be seen readily from that sign; and

[(iii) On each bulkhead or divider that prevents fore and aft vision along the passenger cabin, to indicate emergency exits beyond and obscured by it, except that if this is not possible, the sign may be placed at another appropriate location.

[(2) Each passenger emergency exit marking and each locating sign must meet the following:

[(i) For an airplane for which the application for the type certificate was filed prior to May 1, 1972, each passenger emergency exit marking and each locating sign must be manufactured to meet the requirements of § 25.812(b) of this chapter in effect on April 30, 1972. On these airplanes, no sign may continue to be used if its luminescence (brightness) decreases to below 100 microlamberts. The colors may be reversed if it increases the emergency illumination of the passenger compartment. However, the Administrator may authorize deviation from the 2-inch background requirements if he finds that special circumstances exist that make compliance impractical and that the proposed deviation provides an equivalent level of safety.

[(ii) For an airplane for which the application for the type certificate was filed on or after May 1, 1972, each passenger emergency exit marking and each locating sign must be manufactured to meet the interior emergency exit marking requirements under which the airplane was type certificated. On these airplanes, no sign may continue to be used if its luminescence (brightness) decreases to below 250 microlamberts.

[(c) *Lighting for interior emergency exit markings.* Each passenger-carrying airplane must have an emergency lighting system, independent of the main lighting system; however, sources of general cabin illumination may be common to both the emergency and the main lighting systems if the power supply to the emergency lighting system is independent of the power supply to the main lighting system. The emergency lighting system must—

[(1) Illuminate each passenger exit marking and locating sign;

[(2) Provide enough general lighting in the passenger cabin so that the average illumination when measured at 40-inch intervals at seat armrest height, on the centerline of the main passenger aisle, is at least 0.05 foot-candles; and

[(3) For airplanes type certificated after January 1, 1958, include floor proximity emergency escape path marking which meets the requirements of § 25.812(e) of this chapter in effect on November 26, 1984.

[(d) *Emergency light operation.* Except for lights forming part of emergency lighting subsystems provided in compliance with § 25.812(h) of this chapter (as prescribed in paragraph (h) of this section) that serve no more than one assist means, are independ-

ent of the airplane's main emergency lighting systems, and are automatically activated when the assist means is deployed, each light required by paragraphs (c) and (h) of this section must:

[(1) Be operable manually both from the flightcrew station and from a point in the passenger compartment that is readily accessible to a normal flight attendant seat;

[(2) Have a means to prevent inadvertent operation of the manual controls;

[(3) When armed or turned on at either station, remain lighted or become lighted upon interruption of the airplane's normal electric power;

[(4) Be armed or turned on during taxiing, takeoff, and landing. In showing compliance with this paragraph, a transverse vertical separation of the fuselage need not be considered;

[(5) Provide the required level of illumination for at least 10 minutes at the critical ambient conditions after emergency landing; and

[(6) Have a cockpit control device that has an "on," "off," and "armed" position.

[(e) *Emergency exit operating handles.*

[(1) For a passenger-carrying airplane for which the application for the type certificate was filed prior to May 1, 1972, the location of each passenger emergency exit operating handle, and instructions for opening the exit, must be shown by a marking on or near the exit that is readable from a distance of 30 inches. In addition, for each Type I and Type II emergency exit with a locking mechanism released by rotary motion of the handle, the instructions for opening must be shown by—

[(i) A red arrow with a shaft at least three-fourths inch wide and a head twice the width of the shaft, extending along at least 70° of arc at a radius approximately equal to three-fourths of the handle length; and

[(ii) The word "open" in red letters 1 inch high placed horizontally near the head of the arrow.

[(2) For a passenger-carrying airplane for which the application for the type certificate was filed on or after May 1, 1972, the location of each passenger emergency exit operating handle and instructions for opening the exit must be shown in accordance with the requirements under which the airplane was type certificated. On these airplanes, no operating handle or operating handle cover may continue to be used if its luminescence (brightness) decreases to below 100 microlamberts.

[(f) *Emergency exit access.* Access to emergency exits must be provided as follows for each passenger-carrying airplane:

[(1) Each passageway between individual passenger areas, or leading to a Type I or Type II emergency exit, must be unobstructed and at least 20 inches wide.

[(2) There must be enough space next to each Type I or Type II emergency exit to allow a crewmember to assist in the evacuation of passengers without reducing the unobstructed width of the passageway below that required in paragraph (f)(1) of this section; however, the Administrator may authorize deviation from this requirement for an airplane certificated under the provisions of part 4b of the Civil Air Regulations in effect before December 20, 1951, if he finds that special circumstances exist that provide an equivalent level of safety.

[(3) There must be access from the main aisle to each Type III and Type IV exit. The access from the aisle to these exits must not be obstructed by seats, berths, or other protrusions in a manner that would reduce the effectiveness of the exit. In addition, for a transport category airplane type certificated after January 1, 1958, there must be placards installed in accordance with 25.813(c)(3) of this chapter for each Type III exit after December 3, 1992.

[(4) If it is necessary to pass through a passageway between passenger compartments to reach any required emergency exit from any seat in the passenger cabin, the passageway must not be obstructed. Curtains may, however, be used if they allow free entry through the passageway.

[(5) No door may be installed in any partition between passenger compartments.

[(6) If it is necessary to pass through a doorway separating the passenger cabin from other areas to reach a required emergency exit from any passenger seat, the door must have a means to latch it in the open position, and the door must be latched open during each takeoff and landing. The latching means must be able to withstand the loads imposed upon it when the door is subjected to the ultimate inertia forces, relative to the surrounding structure, listed in § 25.561(b) of this chapter.

[(g) *Exterior exit markings.* Each passenger emergency exit and the means of opening that exit from the outside must be marked on the outside of the airplane. There must be a 2-inch colored band outlining each passenger emergency exit on the side of the fuselage. Each outside marking, including the band, must be readily distinguishable

from the surrounding fuselage area by contrast in color. The markings must comply with the following:

[(1) If the reflectance of the darker color is 15 percent or less, the reflectance of the lighter color must be at least 45 percent.

[(2) If the reflectance of the darker color is greater than 15 percent, at least a 30 percent difference between its reflectance and the reflectance of the lighter color must be provided.

[(3) Exits that are not in the side of the fuselage must have the external means of opening and applicable instructions marked conspicuously in red or, if red is inconspicuous against the background color, in bright chrome yellow and, when the opening means for such an exit is located on only one side of the fuselage, a conspicuous marking to that effect must be provided on the other side. "Reflectance" is the ratio of the luminous flux reflected by a body to the luminous flux it receives.

[(h) *Exterior emergency lighting and escape route.*

[(1) Each passenger-carrying airplane must be equipped with exterior lighting that meets the following requirements:

[(i) For an airplane for which the application for the type certificate was filed prior to May 1, 1972, the requirements of § 25.812 (f) and (g) of this chapter in effect on April 30, 1972.

[(ii) For an airplane for which the application for the type certificate was filed on or after May 1, 1972, the exterior emergency lighting requirements under which the airplane was type certificated.

[(2) Each passenger-carrying airplane must be equipped with a slip-resistant escape route that meets the following requirements:

[(i) For an airplane for which the application for the type certificate was filed prior to May 1, 1972, the requirements of § 25.803(e) of this chapter in effect on April 30, 1972.

[(ii) For an airplane for which the application for the type certificate was filed on or after May 1, 1972, the slip-resistant escape route requirements under which the airplane was type certificated.

[(i) *Floor level exits.* Each floor level door or exit in the side of the fuselage (other than those leading into a cargo or baggage compartment that is not accessible from the passenger cabin) that is 44 or more inches high and 20 or more inches wide, but not wider than 46 inches, each passenger ventral exit (except the ventral exits on Martin 404 and Convair 240 airplanes), and each tail cone exit, must meet the requirements of this section for floor level emergency exits. However, the Administrator may grant a deviation from this paragraph if he finds that circumstances make full compliance impractical and that an acceptable level of safety has been achieved.

[(j) *Additional emergency exits.* Approved emergency exits in the passenger compartments that are in excess of the minimum number of required emergency exits must meet all of the applicable provisions of this section, except paragraphs (f)(1), (2), and (3) of this section, and must be readily accessible.

[(k) On each large passenger-carrying turbojet-powered airplane, each ventral exit and tailcone exit must be—

[(1) Designed and constructed so that it cannot be opened during flight; and

[(2) Marked with a placard readable from a distance of 30 inches and installed at a conspicuous location near the means of opening the exit, stating that the exit has been designed and constructed so that it cannot be opened during flight.

[(l) *Portable lights.* No person may operate a passenger-carrying airplane unless it is equipped with flashlight stowage provisions accessible from each flight attendant seat.]

[(Amdt. 135–43, Eff. 6/3/92)]

§ 135.179 Inoperable instruments and equipment.

(a) No person may take off an aircraft with inoperable instruments or equipment installed unless the following conditions are met:

(1) An approved Minimum Equipment List exists for that aircraft.

(2) The [certificate-holding district office] has issued the certificate holder operations specifications authorizing operations in accordance with an approved Minimum Equipment List. The flight crew shall have direct access at all times prior to flight to all of the information contained in the approved Minimum Equipment List through printed or other means approved by the Administrator in the certificate holders operations specifications. An approved Minimum Equipment List, as authorized by the operations specifications, constitutes an approved change to the type design without requiring recertification.

(3) The approved Minimum Equipment List must:

(i) Be prepared in accordance with the limitations specified in paragraph (b) of this section.

(ii) Provide for the operation of the aircraft with certain instruments and equipment in an inoperable condition.

(4) Records identifying the inoperable instruments and equipment and the information required by (a)(3)(ii) of this section must be available to the pilot.

(5) The aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the operations specifications authorizing use of the Minimum Equipment List.

(b) The following instruments and equipment may not be included in the Minimum Equipment List:

(1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the airplane is type certificated and which are essential for safe operations under all operating conditions.

(2) Instruments and equipment required by an airworthiness directive to be in operable condition unless the airworthiness directive provides otherwise.

(3) Instruments and equipment required for specific operations by this part.

(c) Notwithstanding paragraphs (b)(1) and (b)(3) of this section, an aircraft with inoperable instruments or equipment may be operated under a special flight permit under §§ 21.197 and 21.199 of this chapter.

(Amdt. 135–39, Eff. 6/20/91); [(Amdt. 135–60, Eff. 2/26/96)]

§ 135.180 Traffic alert and collision avoidance system.

(a) [Unless otherwise authorized by the Administrator, after December 31, 1995, no person may operate a turbine-powered airplane that has a passenger seat configuration, excluding any pilot seat, of 10 to 30 seats unless it is equipped with an approved traffic alert and collision avoidance system. If a TCAS II system is installed, it must be capable of coordinating with TCAS units that meet TSO C–119.]

(b) The airplane flight manual required by § 135.21 of this part shall contain the following information on the TCAS I system required by this section:

(1) Appropriate procedures for—

(i) The use of the equipment; and

(ii) Proper flightcrew action with respect to the equipment operation.

(2) An outline of all input sources that must be operating for the TCAS to function properly.

Docket No. 25355 (54 FR 951) Eff. 1/10/89; (Amdt. 135–30, Eff. 2/9/89); [(Amdt. 135–54, Eff. 12/29/94)]

§ 135.181 Performance requirements: Aircraft operated over-the-top or in IFR conditions.

(a) Except as provided in paragraphs (b) and (c) of this section, no person may—

(1) Operate a single-engine aircraft carrying passengers over-the-top or in IFR conditions; or

(2) Operate a multiengine aircraft carrying passengers over-the-top or in IFR conditions at a weight that will not allow it to climb, with the critical engine inoperative, at least 50 feet a minute when operating at the MEAs of the route to be flown or 5,000 feet MSL, whichever is higher.

(b) Notwithstanding the restrictions in paragraph (a)(2) of this section, multiengine helicopters carrying passengers offshore may conduct such operations in over-the-top or in IFR conditions at a weight that will allow the helicopter to climb at least 50 feet per minute with the critical engine inoperative when operating at the MEA of the route to be flown or 1,500 feet MSL, whichever is higher.

(c) Without regard to paragraph (a) of this section—

(1) If the latest weather reports or forecasts, or any combination of them, indicate that the weather along the planned route (including takeoff and landing) allows flight under VFR under the ceiling (if a ceiling exists) and that the weather is forecast to remain so until at least 1 hour after the estimated time of arrival at the destination, a person may operate an aircraft over-the-top; or

(2) If the latest weather reports or forecasts, or any combination of them, indicate that the weather along the planned route allows flight under VFR under the ceiling (if a ceiling exists) beginning at a point no more than 15 minutes flying time at normal cruise speed from the departure airport, a person may—

(i) Take off from the departure airport in IFR conditions "and fly in IFR conditions to a point no more than 15 minutes flying time at normal cruise speed from that airport;

(ii) Operate an aircraft in IFR conditions if unforecast weather conditions are encountered while en route on a flight planned to be conducted under VFR; and

(iii) Make an IFR approach at the destination airport if unforecast weather conditions are encountered at the airport that do not allow an approach to be completed under VFR.

(d) Without regard to paragraph (a) of this section, a person may operate an aircraft over-the-top under conditions allowing—

(1) For multiengine aircraft, descent or continuance of the flight under VFR if its critical engine fails; or

(2) For single-engine aircraft, descent under VFR if its engine fails.

(Amdt. 135–20, Eff. 1/6/87)

§ 135.183 Performance requirements: Land aircraft operated over water.

No person may operate a land aircraft carrying passengers over water unless—

(a) It is operated at an altitude that allows it to reach land in the case of engine failure;

(b) It is necessary for takeoff or landing;

(c) It is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute, at an altitude of 1,000 feet above the surface; or

(d) It is a helicopter equipped with helicopter flotation devices.

§ 135.185 Empty weight and center of gravity: Currency requirement.

(a) No person may operate a multiengine aircraft unless the current empty weight and center of gravity are calculated from values established by actual weighing of the aircraft within the preceding 36 calendar months.

(b) Paragraph (a) of this section does not apply to—

(1) Aircraft issued an original airworthiness certificate within the preceding 36 calendar months; and

(2) Aircraft operated under a weight and balance system approved in the operations specifications of the certificate holder.

Subpart H—Training

§ 135.321 Applicability and terms used.

(a) [Except as provided in § 135.3, this subpart prescribes the requirements applicable to—

[(1) A certificate holder under this part which contracts with, or otherwise arranges to use the services of a training center certificated under part 142 to perform training, testing, and checking functions;

[(2) Each certificate holder for establishing and maintaining an approved training program for crewmembers, check airmen and instructors, and other operations personnel employed or used by that certificate holder; and

[(3) Each certificate holder for the qualification, approval, and use of aircraft simulators and flight training devices in the conduct of the program.]

(b) For the purposes of this subpart, the following terms and definitions apply:

(1) *Initial training.* The training required for crewmembers who have not qualified and served in the same capacity on an aircraft.

(2) *Transition training.* The training required for crewmembers who have qualified and served in the same capacity on another aircraft.

(3) *Upgrade training.* The training required for crewmembers who have qualified and served as second in command on a particular aircraft type, before they serve as pilot in command on that aircraft.

(4) *Differences training.* The training required for crewmembers who have qualified and served on a particular type aircraft, when the Administrator finds differences training is necessary before a crewmember serves in the same capacity on a particular variation of that aircraft.

(5) *Recurrent training.* The training required for crewmembers to remain adequately trained and currently proficient for each aircraft, crewmember position, and type of operation in which the crewmember serves.

(6) *In flight.* The maneuvers, procedures, or functions that must be conducted in the aircraft.

[(7) *Training center.* An organization governed by the applicable requirements of part 142 of this chapter that provides training, testing, and checking under contract or other arrangement to certificate holders subject to the requirements of this part.

[(8) *Requalification training.* The training required for crewmembers previously trained and qualified, but who have become unqualified due to not having met within the required period the—

[(i) Recurrent pilot testing requirements of § 135.293;

[(ii) Instrument proficiency check requirements of § 135.297; or

[(iii) Line checks required by § 135.299 of this part.]

(Amdt. 135–57, Eff. 3/19/96); [(Amdt. 135–63, Eff. 8/1/96)]

§ 135.323 Training program: General.

(a) Each certificate holder required to have a training program under § 135.341 shall:

(1) Establish, obtain the appropriate initial and final approval of, and provide a training program that meets this subpart and that ensures that each crewmember, flight instructor, check airman, and each person assigned duties for the carriage and handling of hazardous materials (as defined in 49 CFR 171.8) is adequately trained to perform their assigned duties.

(2) Provide adequate ground and flight training facilities and properly qualified ground instructors for the training required by this subpart.

(3) Provide and keep current for each aircraft type used and, if applicable, the particular variations within the aircraft type, appropriate training material, examinations, forms, instructions, and procedures for use in conducting the training and checks required by this subpart.

(4) Provide enough flight instructors, check airmen, and simulator instructors to conduct required flight training and flight checks, and simulator training courses allowed under this subpart.

(b) Whenever a crewmember who is required to take recurrent training under this subpart com-

pletes the training in the calendar month before, or the calendar month after, the month in which that training is required, the crewmember is considered to have completed it in the calendar month in which it was required.

(c) Each instructor, supervisor, or check airman who is responsible for a particular ground training subject, segment of flight training, course of training, flight check, or competence check under this part shall certify as to the proficiency and knowledge of the crewmember, flight instructor, or check airman concerned upon completion of that training or check. That certification shall be made a part of the crewmember's record. When the certification required by this paragraph is made by an entry in a computerized recordkeeping system, the certifying instructor, supervisor, or check airman, must be identified with that entry. However, the signature of the certifying instructor, supervisor, or check airman, is not required for computerized entries.

(d) Training subjects that apply to more than one aircraft or crewmember position and that have been satisfactorily completed during previous training while employed by the certificate holder for another aircraft or another crewmember position, need not be repeated during subsequent training other than recurrent training.

(e) Aircraft simulators and other training devices may be used in the certificate holder's training program if approved by the Administrator.

§ 135.324 Training program: Special rules.

(a) Other than the certificate holder, only another certificate holder certificated under this part or a training center certificated under part 142 of this chapter is eligible under this subpart to provide training, testing, and checking under contract or other arrangement to those persons subject to the requirements of this subpart.

(b) A certificate holder may contract with, or otherwise arrange to use the services of, a training center certificated under part 142 of this chapter to provide training, testing, and checking required by this part only if the training center—

(1) Holds applicable training specifications issued under part 142 of this chapter;

(2) Has facilities, training equipment, and courseware meeting the applicable requirements of part 142 of this chapter;

(3) Has approved curriculums, curriculum segments, and portions of curriculum segments applicable for use in training courses required by this subpart; and

(4) [Has sufficient instructor and check airmen qualified under the applicable requirements of §§ 135.337 through 135.340 to provide training, testing, and checking to persons subject to the requirements of this subpart.]

(Amdt. 135–63, Eff. 8/1/96); [(Amdt. 135–67, Eff. 3/21/97)]

§ 135.325 Training program and revision: Initial and final approval.

(a) To obtain initial and final approval of a training program, or a revision to an approved training program, each certificate holder must submit to the Administrator—

(1) An outline of the proposed or revised curriculum, that provides enough information for a preliminary evaluation of the proposed training program or revision; and

(2) Additional relevant information that may be requested by the Administrator.

(b) If the proposed training program or revision complies with this subpart, the Administrator grants initial approval in writing after which the certificate holder may conduct the training under that program. The Administrator then evaluates the effectiveness of the training program and advises the certificate holder of deficiencies, if any, that must be corrected.

(c) The Administrator grants final approval of the proposed training program or revision if the certificate holder shows that the training conducted under the initial approval in paragraph (b) of this section ensures that each person who successfully completes the training is adequately trained to perform that person's assigned duties.

(d) Whenever the Administrator finds that revisions are necessary for the continued adequacy of a training program that has been granted final approval, the certificate holder shall, after notification by the Administrator, make any changes in the program that are found necessary by the Administrator. Within 30 days after the certificate holder receives the notice, it may file a petition to reconsider the notice with the Administrator. The filing of a petition to reconsider stays the notice pending a decision by the Administrator. However, if the Administrator finds that there is an emergency that requires immediate action in the interest of safety, the Administrator may, upon a statement of the reasons, require a change effective without stay.

§ 135.327 Training program: Curriculum.

(a) Each certificate holder must prepare and keep current a written training program curriculum for each type of aircraft for each crewmember required for that type aircraft. The curriculum must include ground and flight training required by this subpart.

(b) Each training program curriculum must include the following:

(1) A list of principal ground training subjects, including emergency training subjects, that are provided.

(2) A list of all the training devices, mockups, systems trainers, procedures trainers, or other training aids that the certificate holder will use.

(3) Detailed descriptions or pictorial displays of the approved normal, abnormal, and emergency maneuvers, procedures and functions that will be performed during each flight training phase or flight check, indicating those maneuvers, procedures and functions that are to be performed during the inflight portions of flight training and flight checks.

§ 135.329 Crewmember training requirements.

(a) Each certificate holder must include in its training program the following initial and transition ground training as appropriate to the particular assignment of the crewmember:

(1) Basic indoctrination ground training for newly hired crewmembers including instruction in at least the—

(i) Duties and responsibilities of crewmembers as applicable;

(ii) Appropriate provisions of this chapter;

(iii) Contents of the certificate holder's operating certificate and operations specifications (not required for flight attendants); and

(iv) Appropriate portions of the certificate holder's operating manual.

(2) The initial and transition ground training in §§ 135.345 and 135.349, as applicable.

(3) Emergency training in § 135.331.

(b) Each training program must provide the initial and transition flight training in § 135.347, as applicable.

(c) Each training program must provide recurrent ground and flight training in § 135.351.

(d) Upgrade training in §§ 135.345 and 135.347 for a particular type aircraft may be included in the training program for crewmembers who have qualified and served as second in command on that aircraft.

(e) In addition to initial, transition, upgrade and recurrent training, each training program must provide ground and flight training, instruction, and practice necessary to ensure that each crewmember—

(1) Remains adequately trained and currently proficient for each aircraft, crewmember position, and type of operation in which the crewmember serves; and

(2) Qualifies in new equipment, facilities, procedures, and techniques, including modifications to aircraft.

§ 135.331 Crewmember emergency training.

(a) Each training program must provide emergency training under this section for each aircraft type, model, and configuration, each crewmember, and each kind of operation conducted, as appropriate for each crewmember and the certificate holder.

(b) Emergency training must provide the following:

(1) Instruction in emergency assignments and procedures, including coordination among crewmembers.

(2) Individual instruction in the location, function, and operation of emergency equipment including—

(i) Equipment used in ditching and evacuation;

(ii) First-aid equipment and its proper use; and

(iii) Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires.

(3) Instruction in the handling of emergency situations including—

(i) Rapid decompression;

(ii) Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas;

(iii) Ditching and evacuation;

(iv) Illness, injury, or other abnormal situations involving passengers or crewmembers; and

(v) Hijacking and other unusual situations.

(4) Review of the certificate holder's previous aircraft accidents and incidents involving actual emergency situations.

(c) Each crewmember must perform at least the following emergency drills, using the proper emergency equipment and procedures, unless the

Administrator finds that, for a particular drill, the crewmember can be adequately trained by demonstration:

(1) Ditching, if applicable.

(2) Emergency evacuation.

(3) Fire extinguishing and smoke control.

(4) Operation and use of emergency exits, including deployment and use of evacuation chutes, if applicable.

(5) Use of crew and passenger oxygen.

(6) Removal of life rafts from the aircraft, inflation of the life rafts, use of life lines, and boarding of passengers and crew, if applicable.

(7) Donning and inflation of life vests and the use of other individual flotation devices, if applicable.

(d) Crewmembers who serve in operations above 25,000 feet must receive instruction in the following:

(1) Respiration.

(2) Hypoxia.

(3) Duration of consciousness without supplemental oxygen at altitude.

(4) Gas expansion.

(5) Gas bubble formation.

(6) Physical phenomena and incidents of decompression.

§ 135.333 Training requirements: Handling and carriage of hazardous materials.

(a) Except as provided in paragraph (d) of this section, no certificate holder may use any person to perform, and no person may perform, any assigned duties and responsibilities for the handling or carriage of hazardous materials (as defined in 49 CFR 171.8), unless within the preceding 12 calendar months that person has satisfactorily completed initial or recurrent training in an appropriate training program established by the certificate holder, which includes instruction regarding—

(1) The proper shipper certification, packaging, marking, labeling, and documentation for hazardous materials; and

(2) The compatibility, loading, storage, and handling characteristics of hazardous materials.

(b) Each certificate holder shall maintain a record of the satisfactory completion of the initial and recurrent training given to crewmembers and ground personnel who perform assigned duties and responsibilities for the handling and carriage of hazardous materials.

(c) Each certificate holder that elects not to accept hazardous materials shall ensure that each crewmember is adequately trained to recognize those items classified as hazardous materials.

(d) If a certificate holder operates into or out of airports at which trained employees or contract personnel are not available, it may use persons not meeting the requirements of paragraphs (a) and (b) of this section to load, offload, or otherwise handle hazardous materials if these persons are supervised by a crewmember who is qualified under paragraphs (a) and (b) of this section.

§ 135.335 Approval of aircraft simulators and other training devices.

(a) Training courses using aircraft simulators and other training devices may be included in the certificate holder's training program if approved by the Administrator.

(b) Each aircraft simulator and other training device that is used in a training course or in checks required under this subpart must meet the following requirements:

(1) It must be specifically approved for—

(i) The certificate holder; and

(ii) The particular maneuver, procedure, or crewmember function involved.

(2) It must maintain the performance, functional, and other characteristics that are required for approval.

(3) Additionally, for aircraft simulators, it must be—

(i) Approved for the type aircraft and, if applicable, the particular variation within type for which the training or check is being conducted; and

(ii) Modified to conform with any modification to the aircraft being simulated that changes the performance, functional, or other characteristics required for approval.

(c) A particular aircraft simulator or other training device may be used by more than one certificate holder.

(d) In granting initial and final approval of training programs or revisions to them, the Administrator considers the training devices, methods, and procedures listed in the certificate holder's curriculum under § 135.327.

(Amdt. 135–1, Eff. 5/7/79)

§ 135.337 [Qualifications: Check airmen (aircraft) and check airmen (simulator).

(a) [For the purposes of this section and § 135.339:

(1) A check airman (aircraft) is a person who is qualified to conduct flight checks in an aircraft, in a flight simulator, or in a flight training device for a particular type aircraft.

(2) A check airman (simulator) is a person who is qualified to conduct flight checks, but only in a flight simulator, in a flight training device, or both, for a particular type aircraft.

(3) Check airmen (aircraft) and check airmen (simulator) are those check airmen who perform the functions described in §§ 135.321(a) and 135.323(a)(4) and (c).

(b) [No certificate holder may use a person, nor may any person serve as a check airman (aircraft) in a training program established under this subpart unless, with respect to the aircraft type involved, that person—

(1) Holds the airman certificates and ratings required to serve as a pilot in command in operations under this part;

(2) Has satisfactorily completed the training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command in operations under this part;

(3) Has satisfactorily completed the proficiency or competency checks that are required to serve as a pilot in command in operations under this part;

(4) Has satisfactorily completed the applicable training requirements of § 135.339;

(5) Holds at least a Class III medical certificate unless serving as a required crewmember, in which case holds a Class I or Class II medical certificate as appropriate.

(6) Has satisfied the recency of experience requirements of § 135.247; and

(7) Has been approved by the Administrator for the check airman duties involved.

[(c) No certificate holder may use a person, nor may any person serve as a check airman (simulator) in a training program established under this subpart unless, with respect to the aircraft type involved, that person meets the provisions of paragraph (b) of this section, or—

(1) Holds the applicable airman certificates and ratings, except medical certificate, required to serve as a pilot in command in operations under this part;

(2) Has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command in operations under this part;

(3) Has satisfactorily completed the appropriate proficiency or competency checks that are required to serve as a pilot in command in operations under this part;

(4) Has satisfactorily completed the applicable training requirements of § 135.339; and

(5) Has been approved by the Administrator for the check airman (simulator) duties involved.

[(d) Completion of the requirements in paragraphs (b)(2), (3), and (4) or (c)(2), (3), and (4) of this section, as applicable, shall be entered in the individual's training record maintained by the certificate holder.

[(e) Check airmen who do not hold an appropriate medical certificate may function as check airmen (simulator), but may not serve as flightcrew members in operations under this part.

[(f) A check airman (simulator) must accomplish the following—

(1) Fly at least two flight segments as a required crewmember for the type, class, or category aircraft involved within the 12-month period preceding the performance of any check airman duty in a flight simulator; or

(2) Satisfactorily complete an approved line-observation program within the period prescribed by that program and that must precede the performance of any check airman duty in a flight simulator.

[(g) The flight segments or line-observation program required in paragraph (f) of this section are considered to be completed in the month required if completed in the calendar month before or the calender month after the month in which they are due.]

[(Amdt. 135–64, Eff. 6/17/96)]

[§ 135.338 Qualifications: Flight instructors (aircraft) and flight instructors (simulator).

[(a) For the purposes of this section and § 135.340:

(1) A flight instructor (aircraft) is a person who is qualified to instruct in an aircraft, in a flight simulator, or in a flight training device for a particular type, class, or category aircraft.

(2) A flight instructor (simulator) is a person who is qualified to instruct in a flight simulator,

in a flight training device, or in both, for a particular type, class, or category aircraft.

(3) Flight instructors (aircraft) and flight instructors (simulator) are those instructors who perform the functions described in §§ 135.321(a) and 135.323(a)(4) and (c).

[(b) No certificate holder may use a person, nor may any person serve as a flight instructor (aircraft) in a training program established under this subpart unless, with respect to the type, class, or category aircraft involved, that person—

(1) Holds the airman certificates and ratings required to serve as a pilot in command in operations under this part;

(2) Has satisfactorily completed the training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command in operations under this part;

(3) Has satisfactorily completed the proficiency or competency checks that are required to serve as a pilot in command in operations under this part;

(4) Has satisfactorily completed the applicable training requirements of § 135.340;

(5) Holds at least a Class III medical certificate; and

(6) Has satisfied the recency of experience requirements of § 135.247.

[(c) No certificate holder may use a person, nor may any person serve as a flight instructor (simulator) in a training program established under this subpart unless, with respect to the type, class, or category aircraft involved, that person meets the provisions of paragraph (b) of this section, or—

(1) Holds the airman certificates and ratings, except medical certificate, required to serve as a pilot in command in operations under this part except before February 19, 1997, that person need not hold a type rating for the type, class, or category of aircraft involved.

(2) Has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command in operations under this part;

(3) Has satisfactorily completed the appropriate proficiency or competency checks that are required to serve as a pilot in command in operations under this part; and

(4) Has satisfactorily completed the applicable training requirements of § 135.340.

[(d) Completion of the requirements in paragraphs (b)(2), (3), and (4) or (c)(2), (3), and (4) of this section, as applicable, shall be entered in the individual's training record maintained by the certificate holder.

[(e) An airman who does not hold a medical certificate may function as a flight instructor in an aircraft if functioning as a non-required crewmember, but may not serve as a flightcrew member in operations under this part.

[(f) A flight instructor (simulator) must accomplish the following—

(1) Fly at least two flight segments as a required crewmember for the type, class, or category aircraft involved within the 12-month period preceding the performance of any flight instructor duty in a flight simulator; or

(2) Satisfactorily complete an approved line-observation program within the period prescribed by that program and that must precede the performance of any check airman duty in a flight simulator.

[(g) The flight segments or line-observation program required in paragraph (f) of this section are considered completed in the month required if completed in the calendar month before, or in the calendar month after, the month in which they are due.]

[(Amdt. 135–64, Eff. 6/17/96)]

§ 135.339 [Initial and transition training and checking: Check airmen (aircraft), check airmen (simulator).

(a) [No certificate holder may use a person nor may any person serve as a check airman unless—

(1) That person has satisfactorily completed initial or transition check airman training; and

(2) Within the preceding 24 calendar months, that person satisfactorily conducts a proficiency or competency check under the observation of an FAA inspector or an aircrew designated examiner employed by the operator. The observation check may be accomplished in part or in full in an aircraft, in a flight simulator, or in a flight training device. This paragraph applies after February 19, 1997.

(b) [The observation check required by paragraph (a)(2) of this section is considered to have been completed in the month required if completed in the calendar month before or the calendar month after the month in which it is due.

[(c) The initial ground training for check airmen must include the following:

(1) Check airman duties, functions, and responsibilities.

(2) The applicable Code of Federal Regulations and the certificate holder's policies and procedures.

(3) The applicable methods, procedures, and techniques for conducting the required checks.

(4) Proper evaluation of student performance including the detection of—

(i) Improper and insufficient training; and

(ii) Personal characteristics of an applicant that could adversely affect safety.

(5) The corrective action in the case of unsatisfactory checks.

(6) The approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft.

[(d) The transition ground training for check airmen must include the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aircraft to which the check airman is in transition.

[(e) The initial and transition flight training for check airmen (aircraft) must include the following—

(1) The safety measures for emergency situations that are likely to develop during a check;

(2) The potential results of improper, untimely, or nonexecution of safety measures during a check;

(3) Training and practice in conducting flight checks from the left and right pilot seats in the required normal, abnormal, and emergency procedures to ensure competence to conduct the pilot flight checks required by this part; and

(4) The safety measures to be taken from either pilot seat for emergency situations that are likely to develop during checking.

[(f) The requirements of paragraph (e) of this section may be accomplished in full or in part in flight, in a flight simulator, or in a flight training device, as appropriate.

[(g) The initial and transition flight training for check airmen (simulator) must include the following:

(1) Training and practice in conducting flight checks in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight checks required by this part. This training and practice must be accomplished in a flight simulator or in a flight training device.

(2) Training in the operation of flight simulators, flight training devices, or both, to ensure competence to conduct the flight checks required by this part.]

[(Amdt. 135–64, Eff. 6/17/96)]

[§ 135.340 Initial and transition training and checking: Flight instructors (aircraft), flight instructors (simulator).

[(a) No certificate holder may use a person nor may any person serve as a flight instructor unless—

(1) That person has satisfactorily completed initial or transition flight instructor training; and

(2) Within the preceding 24 calendar months, that person satisfactorily conducts instruction under the observation of an FAA inspector, an operator check airman, or an aircrew designated examiner employed by the operator. The observation check may be accomplished in part or in full in an aircraft, in a flight simulator, or in a flight training device. This paragraph applies after February 19, 1997.

[(b) The observation check required by paragraph (a)(2) of this section is considered to have been completed in the month required if completed in the calendar month before, or the calendar month after, the month in which it is due.

[(c) The initial ground training for flight instructors must include the following:

(1) Flight instructor duties, functions, and responsibilities.

(2) The applicable Code of Federal Regulations and the certificate holder's policies and procedures.

(3) The applicable methods, procedures, and techniques for conducting flight instruction.

(4) Proper evaluation of student performance including the detection of—

(i) Improper and insufficient training; and

(ii) Personal characteristics of an applicant that could adversely affect safety.

(5) The corrective action in the case of unsatisfactory training progress.

(6) The approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft.

(7) Except for holders of a flight instructor certificate—

(i) The fundamental principles of the teaching-learning process;

(ii) Teaching methods and procedures; and

(iii) The instructor-student relationship.

[(d) The transition ground training for flight instructors must include the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the type, class, or category aircraft to which the flight instructor is in transition.

[(e) The initial and transition flight training for flight instructors (aircraft) must include the following—

(1) The safety measures for emergency situations that are likely to develop during instruction;

(2) The potential results of improper or untimely safety measures during instruction;

(3) Training and practice from the left and right pilot seats in the required normal, abnormal, and emergency maneuvers to ensure competence to conduct the flight instruction required by this part; and

(4) The safety measures to be taken from either the left or right pilot seat for emergency situations that are likely to develop during instruction.

[(f) The requirements of paragraph (e) of this section may be accomplished in full or in part in flight, in a flight simulator, or in a flight training device, as appropriate.

[(g) The initial and transition flight training for a flight instructor (simulator) must include the following:

(1) Training and practice in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight instruction required by this part. These maneuvers and procedures must be accomplished in full or in part in a flight simulator or in a flight training device.

(2) Training in the operation of flight simulators, flight training devices, or both, to ensure competence to conduct the flight instruction required by this part.]

[(Amdt. 135–64, Eff. 6/17/96)]

§ 135.341 Pilot and flight attendant crewmember training programs.

(a) Each certificate holder, other than one who uses only one pilot in the certificate holder's operations, shall establish and maintain an approved pilot training program, and each certificate holder who uses a flight attendant crewmember shall establish and maintain an approved flight attendant training program, that is appropriate to the operations to which each pilot and flight attendant is to be assigned, and will ensure that they are adequately trained to meet the applicable knowledge and practical testing requirements of §§ 135.293 through 135.301. However, the Administrator may authorize a deviation from this section if the Administrator finds that, because of the limited size and scope of the operation, safety will allow a deviation from these requirements.

(b) Each certificate holder required to have a training program by paragraph (a) of this section shall include in that program ground and flight training curriculums for—

(1) Initial training;

(2) Transition training;

(3) Upgrade training;

(4) Differences training; and

(5) Recurrent training.

(c) Each certificate holder required to have a training program by paragraph (a) of this section shall provide current and appropriate study materials for use by each required pilot and flight attendant.

(d) The certificate holder shall furnish copies of the pilot and flight attendant crewmember training program, and all changes and additions, to the assigned representative of the Administrator. If the certificate holder uses training facilities of other persons, a copy of those training programs or appropriate portions used for those facilities shall also be furnished. Curricula that follow FAA published curricula may be cited by reference in the copy of the training program furnished to the representative of the Administrator and need not be furnished with the program.

(Amdt. 135–18, Eff. 8/2/82)

§ 135.343 Crewmember initial and recurrent training requirements.

No certificate holder may use a person, nor may any person serve, as a crewmember in operations under this part unless that crewmember has completed the appropriate initial or recurrent training phase of the training program appropriate to the type of operation in which the crewmember is to serve since the beginning of the 12th calendar month before that service. This section does not apply to a certificate holder that uses only one pilot in the certificate holder's operations.

(Amdt. 135–18, Eff. 8/2/82)

§ 135.345 Pilots: Initial, transition, and upgrade ground training.

Initial, transition, and upgrade ground training for pilots must include instruction in at least the following, as applicable to their duties:

(a) General subjects—

(1) The certificate holder's flight locating procedures;

(2) Principles and methods for determining weight and balance, and runway limitations for takeoff and landing;

(3) Enough meteorology to ensure a practical knowledge of weather phenomena, including the principles of frontal systems, icing, fog, thunderstorms, windshear and, if appropriate, high altitude weather situations;

(4) Air traffic control systems, procedures, and phraseology;

(5) Navigation and the use of navigational aids, including instrument approach procedures;

(6) Normal and emergency communication procedures;

(7) Visual cues before and during descent below DH or MDA; and

(8) Other instructions necessary to ensure the pilot's competence.

(b) For each aircraft type—

(1) A general description;

(2) Performance characteristics;

(3) Engines and propellers;

(4) Major components;

(5) Major aircraft systems (i.e., flight controls, electrical, and hydraulic), other systems, as appropriate, principles of normal, abnormal, and emergency operations, appropriate procedures and limitations;

(6) [Knowledge and] procedures for—

(i) Recognizing and avoiding severe weather situations;

(ii) Escaping from severe weather situations, in case of inadvertent encounters, including low-altitude windshear (except that rotorcraft pilots are not required to be trained in escaping from low-altitude windshear);

(iii) Operating in or near thunderstorms (including best penetrating altitudes), turbulent air (including clear air turbulence), icing, hail, and other potentially hazardous meteorological conditions; and

[(iv) Operating airplanes during ground icing conditions, (i.e., any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane), if the certificate holder expects to authorize takeoffs in ground icing conditions, including:

[(A) The use of holdover times when using deicing/anti-icing fluids;

[(B) Airplane deicing/anti-icing procedures, including inspection and check procedures and responsibilities;

[(C) Communications;

[(D) Airplane surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and knowledge of how contamination adversely affects airplane performance and flight characteristics;

[(E) Types and characteristics of deicing/anti-icing fluids, if used by the certificate holder;

[(F) Cold weather preflight inspection procedures;

[(G) Techniques for recognizing contamination on the airplane;]

(7) Operating limitations;

(8) Fuel consumption and cruise control;

(9) Flight planning;

(10) Each normal and emergency procedure; and

(11) The approved Aircraft Flight Manual, or equivalent.

(Amdt. 135–27, Eff. 1/2/89); [(Amdt. 135–46, Eff. 1/31/94)]

§ 135.347 Pilots: Initial, transition, upgrade, and differences flight training.

(a) Initial, transition, upgrade, and differences training for pilots must include flight and practice in each of the maneuvers and procedures in the approved training program curriculum.

(b) The maneuvers and procedures required by paragraph (a) of this section must be performed in flight, except to the extent that certain maneuvers and procedures may be performed in an aircraft simulator, or an appropriate training device, as allowed by this subpart.

(c) If the certificate holder's approved training program includes a course of training using an aircraft simulator or other training device, each pilot must successfully complete—

(1) Training and practice in the simulator or training device in at least the maneuvers and procedures in this subpart that are capable of being performed in the aircraft simulator or training device; and

(2) A flight check in the aircraft or a check in the simulator or training [device]* to the level of proficiency of a pilot in command or second in command, as applicable, in at least the maneuvers and procedures that are capable of being performed in an aircraft simulator or training device.

*Corrected

§ 135.349 Flight attendants: Initial and transition ground training.

Initial and transition ground training for flight attendants must include instruction in at least the following—

(a) General subjects—

(1) The authority of the pilot in command; and

(2) Passenger handling, including procedures to be followed in handling deranged persons or other persons whose conduct might jeopardize safety.

(b) For each aircraft type—

(1) A general description of the aircraft emphasizing physical characteristics that may have a bearing on ditching, evacuation, and inflight emergency procedures and on other related duties;

(2) The use of both the public address system and the means of communicating with other flight crewmembers, including emergency means in the case of attempted hijacking or other unusual situations; and

(3) Proper use of electrical galley equipment and the controls for cabin heat and ventilation.

§ 135.351 Recurrent training.

(a) Each certificate holder must ensure that each crewmember receives recurrent training and is adequately trained and currently proficient for the type aircraft and crewmember position involved.

(b) Recurrent ground training for crewmembers must include at least the following:

(1) A quiz or other review to determine the crewmember's knowledge of the aircraft and crewmember position involved.

(2) [Instruction as necessary in the subjects required for initial ground training by this subpart, as appropriate, including low-altitude windshear training and training on operating during ground icing conditions, as prescribed in § 135.341 and described in § 135.345, and emergency training.]

(c) Recurrent flight training for pilots must include, at least, flight training in the maneuvers or procedures in this subpart, except that satisfactory completion of the check required by § 135.293 within the preceding 12 calendar months may be substituted for recurrent flight training.

(Amdt. 135–27, Eff. 1/2/89); [(Amdt. 135–46, Eff. 1/31/94)]

§ 135.353 Prohibited drugs.

(a) Each certificate holder or operator shall provide each employee performing a [function listed]* in appendix I to part 121 of this chapter and his or her supervisor with the training specified in that appendix.

(b) No certificate holder or operator may use any contractor to perform a function specified in appendix I to part 121 of this chapter unless that contractor provides each of its employees performing that function for the certificate holder or the operator and his or her supervisor with the training specified in that appendix.

Docket No. 25148 (53 FR 47061) Eff. 11/21/88; (Amdt. 135–28, Eff. 12/21/88)

Subpart J—Maintenance, Preventive Maintenance, and Alterations

§ 135.411 Applicability.

(a) This subpart prescribes rules in addition to those in other parts of this chapter for the maintenance, preventive maintenance, and alterations for each certificate holder as follows:

(1) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained under parts 91 and 43 of this chapter and §§ 135.415, 135.417, and 135.421. An approved aircraft inspection program may be used under § 135.419.

(2) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of ten seats or more, shall be maintained under a maintenance program in §§ 135.415, 135.417, and 135.423 through 135.443.

(b) A certificate holder who is not otherwise required, may elect to maintain its aircraft under paragraph (a)(2) of this section.

§ 135.413 Responsibility for airworthiness.

(a) Each certificate holder is primarily responsible for the airworthiness of its aircraft, including airframes, aircraft engines, propellers, rotors, appliances, and parts, and shall have its aircraft maintained under this chapter, and shall have defects repaired between required maintenance under part 43 of this chapter.

(b) Each certificate holder who maintains its aircraft under § 135.411(a)(2) shall—

(1) Perform the maintenance, preventive maintenance, and alteration of its aircraft, including airframe, aircraft engines, propellers, rotors, appliances, emergency equipment and parts, under its manual and this chapter; or

(2) Make arrangements with another person for the performance of maintenance, preventive maintenance or alteration. However, the certificate holder shall ensure that any maintenance, preventive maintenance, or alteration that is performed by another person is performed under the certificate holder's manual and this chapter.

§ 135.415 Mechanical reliability reports.

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect in an aircraft concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by related fire-warning system;

(3) False fire-warning during flight;

(4) An exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight because of flameout;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Shutdown of more than one engine during flight;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction or opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA; and

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut-down an engine).

(b) For the purpose of this section, "during flight" means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft that occurs or is detected at any time if, in its opinion, the failure, malfunction, or defect has endangered or may endanger the safe operation of the aircraft.

(d) Each certificate holder shall send each report required by this section, in writing, covering each 24-hour period beginning at 0900 hours local time of each day and ending at 0900 hours local time on the next day to the FAA Flight Standards District Office charged with the overall inspection of the certificate holder. Each report of occurrences during a 24-hour period must be mailed or delivered to that office within the next 72 hours. However, a report that is due on Saturday or Sunday may be mailed or delivered on the following Monday and one that is due on a holiday may be mailed or delivered on the next work day. For aircraft operated in areas where mail is not collected, reports may be mailed or delivered within 72 hours after the aircraft returns to a point where the mail is collected.

(e) The certificate holder shall transmit the reports required by this section on a form and in a manner prescribed by the Administrator, and shall include as much of the following as is available:

(1) The type and identification number of the aircraft.

(2) The name of the operator.

(3) The date.

(4) The nature of the failure, malfunction, or defect.

(5) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since last overhaul, if known.

(6) Apparent cause of the failure, malfunction or defect (e.g., wear, crack, design deficiency, or personnel error).

(7) Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) A certificate holder that is also the holder of a type certificate (including a supplemental type certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a type certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under § 21.3 or § 37.17 of this chapter or under the accident reporting provisions of part 830 of the regulations of the National Transportation Safety Board.

(g) No person may withhold a report required by this section even though all information required by this section is not available.

(h) When the certificate holder gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

§ 135.417 Mechanical interruption summary report.

Each certificate holder shall mail or deliver, before the end of the 10th day of the following month, a summary report of the following occurrences in multiengine aircraft for the preceding month to the [certificate-holding district office:]

(a) Each interruption to a flight, unscheduled change of aircraft en route, or unscheduled stop or diversion from a route, caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under § 135.415.

(b) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed. Propeller featherings for training, demonstration, or flight check purposes need not be reported.

[(Amdt. 135–60, Eff. 2/26/96)]

§ 135.419 Approved aircraft inspection program.

(a) Whenever the Administrator finds that the aircraft inspections required or allowed under part 91 of this chapter are not adequate to meet this part, or upon application by a certificate holder, the Administrator may amend the certificate holder's operations specifications under § 135.17, to require or allow an approved aircraft inspection program for any make and model aircraft of which the certificate holder has the exclusive use of at least one aircraft (as defined in § 135.25(b)).

(b) A certificate holder who applies for an amendment of its operations specifications to allow an approved aircraft inspection program must submit that program with its application for approval by the Administrator.

(c) Each certificate holder who is required by its operations specifications to have an approved aircraft inspection program shall submit a program for approval by the Administrator within 30 days of the amendment of its operations specifications or within any other period that the Administrator may prescribe in the operations specifications.

(d) The aircraft inspection program submitted for approval by the Administrator must contain the following:

(1) Instructions and procedures for the conduct of aircraft inspections (which must include necessary tests and checks), setting forth in detail the parts and areas of the airframe, engines, propellers, rotors, and appliances, including emergency equipment, that must be inspected.

(2) A schedule for the performance of the aircraft inspections under paragraph (1) of this paragraph expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

(3) Instructions and procedures for recording discrepancies found during inspections and correction or deferral of discrepancies including form and disposition of records.

(e) After approval, the certificate holder shall include the approved aircraft inspection program in the manual required by § 135.21.

(f) Whenever the Administrator finds that revisions to an approved aircraft inspection program are necessary for the continued adequacy of the program, the certificate holder shall, after notification by the Administrator, make any changes in the program found by the Administrator to be necessary. The certificate holder may petition the Administrator to reconsider the notice to make any changes in a program. The petition must be filed with the representatives of the Administrator assigned to it within 30 days after the certificate holder receives the notice. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

(g) Each certificate holder who has an approved aircraft inspection program shall have each aircraft that is subject to the program inspected in accordance with the program.

(h) The registration number of each aircraft that is subject to an approved aircraft inspection program must be included in the operations specifications of the certificate holder.

§ 135.421 Additional maintenance requirements.

(a) Each certificate holder who operates an aircraft type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.

(b) For the purpose of this section, a manufacturer's maintenance program is one which is contained in the maintenance manual or maintenance instructions set forth by the manufacturer as required by this chapter for the aircraft, aircraft engine, propeller, rotor or item of emergency equipment.

§ 135.423 Maintenance, preventive maintenance, and alteration organization.

(a) Each certificate holder that performs any of its maintenance (other than required inspections), preventive maintenance, or alterations, and each person with whom it arranges for the performance of that work, must have an organization adequate to perform the work.

(b) Each certificate holder that performs any inspections required by its manual under § 135.427(b)(2) or (3), (in this subpart referred to as "required inspections"), and each person with whom it arranges for the performance of that work, must have an organization adequate to perform that work.

(c) Each person performing required inspections in addition to other maintenance, preventive maintenance, or alterations, shall organize the performance of those functions so as to separate the required inspection functions from the other maintenance, preventive maintenance, and alteration functions. The separation shall be below the level of administrative control at which overall responsibility for the required inspection functions and other maintenance, preventive maintenance, and alteration functions is exercised.

§ 135.425 Maintenance, preventive maintenance, and alteration programs.

Each certificate holder shall have an inspection program and a program covering other maintenance, preventive maintenance, and alterations, that ensures that—

(a) Maintenance, preventive maintenance, and alterations performed by it, or by other persons, are performed under the certificate holder's manual;

(b) Competent personnel and adequate facilities and equipment are provided for the proper performance of maintenance, preventive maintenance and alterations; and

(c) Each aircraft released to service is airworthy and has been properly maintained for operation under this part.

§ 135.427 Manual requirements.

(a) Each certificate holder shall put in its manual the chart or description of the certificate holder's organization required by § 135.423 and a list of persons with whom it has arranged for the performance of any of its required inspections, other maintenance, preventive maintenance, or alterations, including a general description of that work.

(b) Each certificate holder shall put in its manual the programs required by § 135.425 that must be followed in performing maintenance, preventive maintenance, and alterations of that certificate holder's aircraft, including airframes, aircraft engines, propellers, rotors, appliances, emergency equipment, and parts, and must include at least the following:

(1) The method of performing routine and nonroutine maintenance (other than required inspections), preventive maintenance, and alterations.

(2) A designation of the items of maintenance and alteration that must be inspected (required inspections) including at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not performed properly or if improper parts or materials are used.

(3) The method of performing required inspections and a designation by occupational title of personnel authorized to perform each required inspection.

(4) Procedures for the reinspection of work performed under previous required inspection findings (''buy-back procedures'').

(5) Procedures, standards, and limits necessary for required inspections and acceptance or rejection of the items required to be inspected and for periodic inspection and calibration of precision tools, measuring devices, and test equipment.

(6) Procedures to ensure that all required inspections are performed.

(7) Instructions to prevent any person who performs any item of work from performing any required inspection of that work.

(8) Instructions and procedures to prevent any decision of an inspector regarding any required inspection from being countermanded by persons other than supervisory personnel of the inspection unit, or a person at the level of administrative control that has overall responsibility for the management of both the required inspection functions and the other maintenance, preventive maintenance, and alterations functions.

(9) Procedures to ensure that required inspections, other maintenance, preventive maintenance, and alterations that are not completed as a result of work interruptions are properly completed before the aircraft is released to service.

(c) Each certificate holder shall put in its manual a suitable system (which may include a coded system) that provides for the retention of the following information—

(1) A description (or reference to data acceptable to the Administrator) of the work performed;

(2) The name of the person performing the work if the work is performed by a person outside the organization of the certificate holder; and

(3) The name or other positive identification of the individual approving the work.

[(d) For the purposes of this part, the certificate holder must prepare that part of its manual containing maintenance information and instructions, in whole or in part, in printed form or other form, acceptable to the Administrator, that is retrievable in the English language.]

[(Amdt. 135–66, Eff. 3/12/97)]

§ 135.429 Required inspection personnel.

(a) No person may use any person to perform required inspections unless the person performing the inspection is appropriately certificated, properly trained, qualified, and authorized to do so.

(b) No person may allow any person to perform a required inspection unless, at the time, the person performing that inspection is under the supervision and control of an inspection unit.

(c) No person may perform a required inspection if that person performed the item of work to be inspected.

(d) In the case of rotorcraft that operate in remote areas or sites, the Administrator may approve procedures for the performance of required inspection items by a pilot when no other qualified person is available, provided—

(1) The pilot is employed by the certificate holder;

(2) It can be shown to the satisfaction of the Administrator that each pilot authorized to perform required inspections is properly trained and qualified;

(3) The required inspection is a result of a mechanical interruption and is not a part of a certificate holder's continuous airworthiness maintenance program;

(4) Each item is inspected after each flight until the item has been inspected by an appropriately certificated mechanic other than the one who originally performed the item of work; and

(5) Each item of work that is a required inspection item that is part of the flight control system shall be flight tested and reinspected before the aircraft is approved for return to service.

(e) Each certificate holder shall maintain, or shall determine that each person with whom it arranges to perform its required inspections maintains, a current listing of persons who have been trained, qualified, and authorized to conduct required inspections. The persons must be identified by name, occupational title and the inspections that they are authorized to perform. The certificate holder (or person with whom it arranges to perform its required inspections) shall give written information to each person so authorized, describing the extent of that person's responsibilities, authorities, and inspectional limitations. The list shall be made available for inspection by the Administrator upon request.

(Amdt. 135–20, Eff. 1/6/87)

§ 135.431 Continuing analysis and surveillance.

(a) Each certificate holder shall establish and maintain a system for the continuing analysis and surveillance of the performance and effectiveness of its inspection program and the program covering other maintenance, preventive maintenance, and alterations and for the correction of any deficiency in those programs, regardless of whether those programs are carried out by the certificate holder or by another person.

(b) Whenever the Administrator finds that either or both of the programs described in paragraph (a) of this section does not contain adequate procedures and standards to meet this part, the certificate holder shall, after notification by the Administrator, make changes in those programs requested by the Administrator.

(c) A certificate holder may petition the Administrator to reconsider the notice to make a change in a program. The petition must be filed with the [certificate-holding district office] within 30 days after the certificate holder receives the notice. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

[(Amdt. 135–60, Eff. 2/26/96)]

§ 135.433 Maintenance and preventive maintenance training program.

Each certificate holder or a person performing maintenance or preventive maintenance functions for it shall have a training program to ensure that each person (including inspection personnel) who determines the adequacy of work done is fully informed about procedures and techniques and new equipment in use and is competent to perform that person's duties.

§ 135.435 Certificate requirements.

(a) Except for maintenance, preventive maintenance, alterations, and required inspections performed by repair stations certificated under the provisions of subpart C of part 145 of this chapter, each person who is directly in charge of maintenance, preventive maintenance, or alterations, and each person performing required inspections must hold an appropriate airman certificate.

(b) For the purpose of this section, a person "directly in charge" is each person assigned to a position in which that person is responsible for the work of a shop or station that performs maintenance, preventive maintenance, alterations, or other functions affecting airworthiness. A person who is "directly in charge" need not physically observe and direct each worker constantly but must be available for consultation and decision on matters requiring instruction or decision from higher authority than that of the person performing the work.

§ 135.437 Authority to perform and approve maintenance, preventive maintenance, and alterations.

(a) A certificate holder may perform, or make arrangements with other persons to perform, maintenance, preventive maintenance, and alterations as provided in its maintenance manual. In addition, a certificate holder may perform these functions for another certificate holder as provided in the maintenance manual of the other certificate holder.

(b) A certificate holder may approve any airframe, aircraft engine, propeller, rotor, or appliance

for return to service after maintenance, preventive maintenance, or alterations that are performed under paragraph (a) of this section. However, in the case of a major repair or alteration, the work must have been done in accordance with technical data [approved]* by the Administrator.

§ 135.439 Maintenance recording requirements.

(a) Each certificate holder shall keep (using the system specified in the manual required in § 135.427) the following records for the periods specified in paragraph (b) of this section:

(1) All the records necessary to show that all requirements for the issuance of an airworthiness release under § 135.443 have been met.

(2) Records contain the following information:

(i) The total time in service of the airframe, engine, propeller, and rotor.

(ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.

(iii) The time since last overhaul of each item installed on the aircraft which are required to be overhauled on a specified time basis.

(iv) The identification of the current inspection status of the aircraft, including the time since the last inspections required by the inspection program under which the aircraft and its appliances are maintained.

(v) The current status of applicable airworthiness directives, including the date and methods of compliance, and, if the airworthiness directive involves recurring action, the time and date when the next action is required.

(vi) A list of current major alterations and repairs to each airframe, engine, propeller, rotor, and appliance.

(b) Each certificate holder shall retain the records required to be kept by this section for the following periods:

(1) Except for the records of the last complete overhaul of each airframe, engine, propeller, rotor, and appliance the records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or superseded by other work or for one year after the work is performed.

(2) The records of the last complete overhaul of each airframe, engine, propeller, rotor, and appliance shall be retained until the work is superseded by work of equivalent scope and detail.

(3) The records specified in paragraph (a)(2) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold.

(c) The certificate holder shall make all maintenance records required to be kept by this section available for inspection by the Administrator or any representative of the National Transportation Safety Board.

§ 135.441 Transfer of maintenance records.

Each certificate holder who sells a United States registered aircraft shall transfer to the purchaser, at the time of the sale, the following records of that aircraft, in plain language form or in coded form which provides for the preservation and retrieval of information in a manner acceptable to the Administrator.

(a) The records specified in § 135.439(a)(2).

(b) The records specified in § 135.439(a)(1) which are not included in the records covered by paragraph (a) of this section, except that the purchaser may allow the seller to keep physical custody of such records. However, custody of records by the seller does not relieve the purchaser of its responsibility under § 135.439(c) to make the records available for inspection by the Administrator or any representative of the National Transportation Safety Board.

§ 135.443 Airworthiness release or aircraft maintenance log entry.

(a) No certificate holder may operate an aircraft after maintenance, preventive maintenance, or alterations are performed on the aircraft unless the certificate holder prepares, or causes the person with whom the certificate holder arranges for the performance of the maintenance, preventive maintenance, or alterations, to prepare—

(1) An airworthiness release; or

(2) An appropriate entry in the aircraft maintenance log.

(b) The airworthiness release or log entry required by paragraph (a) of this section must—

(1) Be prepared in accordance with the procedure in the certificate holder's manual;

(2) Include a certificate that—

(i) The work was performed in accordance with the requirements of the certificate holder's manual;

(ii) All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed;

*[Corrected]

(iii) No known condition exists that would make the aircraft unairworthy;

(iv) So far as the work performed is concerned, the aircraft is in condition for safe operation; and

(3) Be signed by an authorized certificated mechanic or repairman, except that a certificated repairman may sign the release or entry only for the work for which that person is employed and for which that person is certificated.

Notwithstanding paragraph (b)(3) of this section, after maintenance, preventive maintenance, or alternations performed by a repair station certified under the provisions of subpart C of part 145, the airworthiness release or log entry required by paragraph (a) of this section may be signed by a person authorized by that repair station.

(c) Instead of restating each of the conditions of the certification required by paragraph (b) of this section, the certificate holder may state in its manual that the signature of an authorized certificated mechanic or repairman constitutes that certification.

(Amdt. 135–29, Eff. 12/22/88)

country users and over 90 percent of the 350,000 back-country, below rim users each year) would accrue primarily from the increased quiet resulting from noise reduction. Thus, DOI concluded that this NPRM would be cost-beneficial because cost to air tour operators would be minimal and the benefits to park resources and visitors would be significant.

For the purpose of this rule, the FAA updated the DOI's December 1987 data as follows: (1) there are still 40 to 45 air tour operators; (2) the estimated revenue generated by the industry is now over $100 million each year; and (3) the number of ground visitors has increased to almost 5 million. The FAA believes that extending the current SFAR No. 50–2 will not alter current industry practices in the Grand Canyon special flight rules area and will not affect growth in air traffic. Additionally, the rule will not cause significant economic impact because it will not change the volume of traffic, the altitude of flight routes, or the noise characteristics of the aircraft typically used in canyon flights between now and 1997. Therefore, the FAA has determined that the extension will not result in additional costs to the air tour operators.

Since the rule was first promulgated in 1987, the number of ground visitors increased by 50 percent. During this period, the estimated number of air tour operators remained unchanged, while the estimated revenue generated by the air tour industry has doubled. Therefore, the FAA has determined that any costs incurred by the air tour operators are not overly burdensome.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a rule will have "a significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines the FAA's procedures and criteria for implementing the RFA. Small entities are independently owned and operated small businesses and small, not-for-profit organizations. A substantial number of small entities is defined as a number that is 11 or more and which is more than one-third of the small entities subject to this direct final rule. The FAA determined that this rule will not result in a significant economic impact on a substantial number of small entities.

International Trade Impact Analysis

This action is expected to have neither an adverse impact on the trade opportunities for U.S. firms doing business abroad nor on foreign firms doing business in the United States. This assessment is based on the fact that part 135 air tour operators potentially impacted by this rule do not compete with similar operators abroad. That is, their competitive environment is confined to the Grand Canyon National Park.

Federalism Implications

This action will not have substantial effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this action will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

International Civil Aviation Organization and Joint Aviation Regulations

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization Standards and Recommended Practices (SARP) to the maximum extent practicable. For this action, the FAA has reviewed the SARP of Annex 10. The FAA has determined that this amendment will not present any differences.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96–511), there are no requirements for information collection associated with this rule.

Conclusion

For the reasons set forth above, the FAA has determined that this rule is not a significant regulatory action under Executive Order 12866. In addition, the FAA certifies that this action will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This rule is not considered significant under DOT Regulatory Policies and Procedures.

The Amendment

For the reasons set forth above, the Federal Aviation Administration is amending SFAR No. 50–2 (14 CFR parts 91 and 135) effective June 15, 1995.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1153, 40101, 40105, 44113, 44701–44705, 44707–44717, 44722, and 45303.

Special Federal Aviation Regulation 50–2

Commuter Operations and General Certification and Operations Requirements

Adopted: December 12, 1995 **Effective: January 19, 1996**

(Published in 60 FR 65832, December 20, 1995)

SUMMARY: This rule requires certain commuter operators that now conduct operations under part 135 to conduct those operations under part 121. The commuter operators affected are those conducting scheduled passenger-carrying operations in airplanes that have passenger-seating configurations of 10 to 30 seats (excluding any crewmember seat) and those conducting scheduled passenger-carrying operations in turbojet airplanes regardless of seating configuration. The rule revises the requirements concerning operating certificates and operations specifications for all part 121, 125, and 135 certificate holders. The rule also requires certain management officials for all certificate holders under parts 121 and 135. The rule is intended to increase safety in scheduled passenger-carrying operations and to clarify, update, and consolidate the certification and operations requirements for persons who transport passengers or property by air for compensation or hire.

NOTE: Please refer to preamble pages P–619 through P–734 for entire preamble.

Special Federal Aviation Regulation 50–2

Special Flight Rules in the Vicinity of Grand Canyon National Park

Adopted: December 24, 1996 **Effective: May 1, 1997**

(Published in 61 FR 69302, December 31, 1996)
(Corrected in 62 FR 2445, January 16, 1997)

SUMMARY: This final rule is one part of an overall strategy to further reduce the impact of aircraft noise on the park environment and to assist the National Park Service in achieving its statutory mandate, imposed by Public Law 100–91, to provide for the substantial restoration of natural quiet and experience in Grand Canyon National Park. This action is issued concurrently with: a Notice of Proposed Rulemaking regarding Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park; a Notice of Availability of Proposed Commercial Air Tour Routes for Grand Canyon National Park and Request for Comments; and the Environmental Assessment issued with this final rule. This action amends part 93 of the Federal Aviation Regulations by adding a new subpart to codify the provisions of Special Federal Aviation Regulation No. 50–2, Special Flight Rules in the Vicinity of Grand Canyon National Park; modifies the dimensions of the Grand Canyon National Park Special Flight Rules Area; establishes new and modifies existing flight-free zones; establishes new and modifies existing flight corridors; and establishes reporting requirements for commercial sightseeing companies operating in the Special Flight Rules Area. In addition, to provide further protection for park resources, this final rule prohibits commercial sightseeing operations in the Zuni and Dragon corridors during certain time periods, and limits the number of aircraft that can be used for commercial sightseeing operations in the Grand Canyon National Park Special Flight Rules Area.

FOR FURTHER INFORMATION CONTACT: Mr. Neil Saunders, Airspace and Rules Division (ATA–400), Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–8783. For the Environmental Assessment contact Mr. William J. Marx, Manager, Environmental Programs Division (ATA–300), Office of Air Traffic

Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3075.

SUPPLEMENTARY INFORMATION:

History

Beginning in the summer of 1986, the FAA initiated regulatory action to address increasing air traffic over Grand Canyon National Park (GCNP). On March 26, 1987, the FAA issued Special Federal Aviation Regulation (SFAR) No. 50 (subsequently amended on June 15, 1987; 52 FR 22734) establishing flight regulations in the vicinity of the Grand Canyon. The purpose of the SFAR was to reduce the risk of midair collision, reduce the risk of terrain contact accidents below the rim level, and reduce the impact of aircraft noise on the park environment.

In 1987, Congress enacted Public Law (Pub. L.) 100–91, commonly known as the National Parks Overflights Act. Public Law 100–91 stated, in part, that noise associated with aircraft overflights at GCNP was causing "a significant adverse effect on the natural quiet and experience of the park and current aircraft operations at the Grand Canyon National Park have raised serious concerns regarding public safety, including concerns regarding the safety of park users."

Section 3 of Pub. L. 100–91 required the Department of the Interior (DOI) to submit to the FAA recommendations to protect resources in the Grand Canyon from adverse impacts associated with aircraft overflights. The law mandated that the recommendations: (1) Provide for substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight; (2) with limited exceptions, prohibit the flight of aircraft below the rim of the canyon; and (3) designate flight-free zones except for purposes of administration and emergency operations.

In December 1987, the DOI transmitted its "Grand Canyon Aircraft Management Recommendation" to the FAA, which included both rulemaking and nonrulemaking actions. Public Law 100–91 required the FAA to prepare and issue a final plan for the management of air traffic above the Grand Canyon, implementing the recommendations of the DOI without change unless the FAA determined that executing the recommendations would adversely affect aviation safety. After the FAA determined that some of the DOI recommendations would adversely affect aviation safety, the recommendations were modified to resolve those concerns.

On May 27, 1988, the FAA issued SFAR No. 50–2 revising the procedures for operation of aircraft in the airspace above the Grand Canyon (53 FR 20264; June 2, 1988). SFAR No. 50–2 established a Special Flight Rules Area (SFRA) from the surface to 14,499 feet above mean sea level (MSL) in the area of the Grand Canyon. The SFAR prohibited flight below a certain altitude in each of five sectors of this area, with certain exceptions. The SFAR established four flight-free zones from the surface to 14,499 feet MSL covering large areas of the park. The SFAR provided for special routes for commercial sightseeing operators, which are required to conduct operations under part 135, as authorized by special operations specifications. Finally, the SFAR contained certain terrain avoidance and communications requirements for flights in the area.

A second major provision of Section 3 of Pub. L. 100–91 required the DOI to submit a report to Congress ". . . discussing . . . whether [SFAR No. 50–2] has succeeded in substantially restoring the natural quiet in the park; and . . . such other matters, including possible revisions in the plan, as may be of interest. The report was to include comments by the FAA "regarding the effect of the plan's implementation on aircraft safety." Public Law 100–91 mandated a number of studies related to the effect of overflights on parks.

On September 12, 1994, the DOI submitted its final report and recommendations to Congress. This report, entitled, "Report on Effects of Aircraft Overflights on the National Park System" (Report to Congress), was published in July 1995. The Report to Congress recommended numerous revisions to SFAR No. 50–2 in order to substantially restore natural quiet in GCNP. Recommendation No. 10, which is of particular interest to this rulemaking, states: "Improve SFAR 50–2 to Effect and Maintain the Substantial Restoration of Natural Quiet at Grand Canyon National Park." This recommendation incorporated the following general concepts: Simplification of the commercial sightseeing route structure; expansion of flight-free zones; accommodation of the forecast growth in the air tour industry; phased-in use of quieter aircraft technology; temporal restrictions ("flight-free" time periods); use of the full range of methods and tools for problem solving; and institution of changes in approaches to park management, including the establishment of an acoustic monitoring program by the National Park Service (NPS) in coordination with the FAA.

On June 15, 1995, the FAA published a final rule that extended the provisions of SFAR No. 50–2 to June 15, 1997 (60 FR 31608). This action allowed the FAA sufficient time to review the NPS recommendations and to initiate and complete appropriate rulemaking action.

Interagency Working Group

On December 22, 1993, Secretary of Transportation Federico Peña and Secretary of the Interior Bruce Babbitt formed an interagency working group (IWG) to explore ways to limit or reduce the impacts from overflights on national parks, including GCNP. Secretary Babbitt and Secretary Peña concurred that increased flight operations at GCNP and other national parks have significantly diminished the national park experience for some park visitors, and that measures can and should be taken to preserve a quality park experience for visitors, while providing access to the airspace over national parks. The FAA has been working closely with the NPS to identify and deal with the impacts of aviation on parks, and the two agencies will continue to identify and pursue the most effective solutions.

The FAA's role in the IWG has been to promote, develop, and foster aviation safety, and to provide for the safe and efficient use of airspace, while recognizing the need to preserve, protect, and enhance the environment by minimizing the adverse effects of aviation on the environment. The NPS's role in the IWG has been to protect public land resources in national parks, preserve environmental values of those areas, including wilderness areas, and provide for public enjoyment of those areas.

In March 1994, the two agencies jointly issued an Advance Notice of Proposed Rulemaking (ANPRM) seeking public comment on policy recommendations addressing the effects of aircraft overflights on national parks, including GCNP (59 FR 12740; March 17, 1994). The recommendations presented for comment included voluntary measures, altitude restrictions, flight-free periods, flight-free zones, allocation of noise equivalencies, and incentives to encourage use of quiet aircraft technology. In response to the ANPRM, the FAA received 644 comments that specifically addressed GCNP. These comments were summarized in the NPRM published on July 31, 1996 (61 FR 40120; Notice 96–11).

President's Memorandum

The President, on April 22, 1996, issued a Memorandum for the Heads of Executive Departments and Agencies to address the significant impacts on visitor experience in national parks. Specifically, the President directed the Secretary of Transportation to issue proposed regulations for GCNP that would place appropriate limits on sightseeing aircraft to reduce the noise immediately and make further substantial progress towards restoration of natural quiet, as defined by the Secretary of the Interior, while maintaining aviation safety in accordance with Pub. L. 100–91.

Notice of Proposed Rulemaking Draft Environmental Assessment

On July 31, 1996 the FAA published an NPRM (61 FR 40120; Notice 96–11), to reduce the impact of aircraft noise on GCNP and to assist the NPS in achieving its statutory mandate imposed by Pub. L. 100–91 to provide for the substantial restoration of natural quiet and experience in GCNP. Notice 96–11 proposed the following: Codification and amendment to the SFAR 50–2, Special Flight Rules in the Vicinity of GCNP; modification of the dimensions of the Grand Canyon National Park Special Flight Rules Area; establishment of new flight-free zones and flight corridors, as well as modification of existing flight-free zones and flight corridors; establishment of flight-free periods (curfews) and/or an interim moratorium on additional commercial sightseeing air tours or tour operators (caps); and establishment of reporting requirements for commercial sightseeing companies operating in the SFRA. In addition to these areas, the FAA sought comment on a number of questions and alternatives regarding curfews and caps, as well as on the issue of quiet aircraft technology. The comment period for the proposed rule, originally set for 60 days, was subsequently extended for 45 days (61 FR 54716; October 21, 1996) as directed by the Congress in the Federal Aviation Authorization Act of 1996.

On August 21, 1996, the notice of availability of the draft Environmental Assessment (EA) was published in the *Federal Register* (61 FR 43196). Comments on the draft EA were to be received on or before October 4, 1996. This date was subsequently extended, as directed by Congress in the Federal Aviation Authorization Act of 1996, to November 18, 1996.

Comments received in response to this Notice of Availability of the draft EA have been addressed in the final EA published concurrently with this final rule.

Public Meetings

On September 16–20, 1996, in Scottsdale, AZ, and Las Vegas, NV, the FAA held public meetings to obtain additional comment on the Notice 96–11 and on the draft environmental assessment. Comments and the transcripts of these meetings have been placed in the rulemaking docket.

The following information summarizes what occurred at the public meetings on the Grand Canyon NPRM and draft EA, held in Scottsdale, Arizona, September 16 and 17, 1996, and Las Vegas, Nevada, September 19 and 20, 1996.

Senator Reid of Nevada, by proxy in Las Vegas, noted his opposition to the proposed rule. He indicated that 44 percent of the Canyon was already covered by flight-free zones, and that only 14 percent of park airspace is available to the operators now. He also opined that (1) the requirements of Pub. L. 100–91 (i.e., substantial restoration of natural quiet) have been accomplished by the SFAR; and (2) the new rule would have major adverse impacts on safety and economics. He foresaw devastating financial impacts on the air tour industry and on local communities. Congresswoman Vucanovich of Nevada, also by proxy in Las Vegas, indicated that she was concerned about the effects of the proposed rule on the air tour industry, noting that there were no flight routes specified in Notice 96–11. She believed that flight-free periods/curfews would raise both economic and safety issues. She also believed that an Environmental Impact Statement (EIS), as opposed to an EA, was required under the National Environmental Policy Act (NEPA) based on the highly controversial nature of the NPRM.

The air tour operators talked about potential adverse economic impacts of the NPRM, potential negative impacts on safety—such as compressing more flights into the smaller areas as the result of curfews and additional flight-free zones—and the importance of quiet aircraft technology, and incentives to manufacture and use quieter aircraft, noting specifically that quieter aircraft are far more expensive to purchase and operate than are noisier aircraft. A number of operators emphasized their belief that "SFAR 50–2 works," both from safety and environmental standpoints. Many of these same operators questioned the NPS's definitions of natural quiet and substantial restoration thereof, and challenged the science involved, including noise modeling conducted by both FAA and NPS, in measuring the noise impacts of commercial air tour overflights and in assessing the degree to which natural quiet has been restored under SFAR 50–2. Several operators and representatives of aircraft manufacturers offered concrete suggestions as to the kinds of incentives that might prove useful.

As for other aviation interests, general aviation groups expressed concerns about their constituents' ability to transit the park safely and conveniently.

Representatives of environmental groups and individual environmentalists pointed out that the addition of two flight-free zones is misleading, in that aircraft noise can travel from 13–16 miles laterally, so the flight-free zones are not free of noise. A number of environmentalists indicated that the NPS's definition of substantial restoration of natural quiet is too liberal and allows too much aircraft noise. They also pointed out that, in contrast to the lack of control on air tour overflight volume, there are tight controls on all commercial activities on the ground in parks. Environmentalists spoke favorably about the promise of quieter aircraft technology and supported the development of incentives to manufacture and use quieter aircraft.

Representatives of Native American tribes living in and around the Grand Canyon expressed major disappointment with what they viewed as the failure by the FAA and NPS to consult with them adequately on the NPRM and the draft EA. They emphasized that the net effect of the revised rule would be to relocate noise impacts from the park to tribal lands, with concomitant adverse effects on their natural and cultural resources and on the health and safety of tribe members and visitors to tribal lands. They believed that the situation called for an EIS, not an EA.

While the FAA held separate meetings in both Scottsdale, AZ, and Las Vegas, NV, on the NPRM and the EA, a number of commenters at the NPRM meetings addressed the EA as well, and vice versa. The majority of comments from all "sides" of the issue were negative with regard to the EA itself, which many found inadequate for a variety of reasons, including the fact that the range of alternatives was limited to either no action or the proposed alternative, and an overall lack of specificity. Several commenters pointed to inconsistencies between FAA and NPS noise modeling methodologies, which led the agencies to two different conclusions as to the potential effectiveness of the revised rule. Air tour operators pointed out that the potential adverse impacts of the NPRM on their operations, including safety concerns, were not justified in view of FAA's findings that the proposed alternative would not provide any significant improvement in natural quiet, while environmentalists argued that the EA failed to include any alternative which would substantially restore natural quiet to the park. More than a few commenters felt that NEPA compliance in this case required an EIS, not an EA.

One of the few areas of common ground to emerge from these meetings was widespread support for further use of quieter aircraft technology and for the development and implementation of incentives to manufacture and use quieter aircraft.

Congressional Hearings

From October 10 to 11, 1996, Congressional hearings were held by the Aviation Subcommittee of the Senate Committee on Commerce, Science, and Transportation in Las Vegas, Nevada, and Tempe, Arizona. The hearings were held to gather testimony from various entities involved in or affected by the FAA's proposed Special Flight Rules in the Vicinity of Grand Canyon National Park. Senator McCain of Arizona chaired and made opening statements at both field hearings indicating that they were there to examine the impacts of the proposed rule and the draft environmental assessment. He expressed his disappointment in the lack of mention of quiet aircraft technology in Notice 96–11, indicating that he hoped FAA would provide appropriate incentives in the final rule.

The Nevada Congressional delegation (Senator Bryan and Congressman Ensign in person, Senator Reid and Congresswoman Vucanovich by proxy) indicated, at the Las Vegas hearing, their opposition to Notice 96–11 as written, noting safety concerns as well as ones related to economics, NEPA compliance, and the lack of quiet aircraft technology incentives.

The issues raised by Senator McCain and the Arizona delegation were also addressed by others testifying at the field hearings. There were points and counterpoints raised as to the effectiveness of SFAR 50–2 in substantially restoring natural quiet in the Grand Canyon, as mandated by Pub. L. 100–91; NPS's definition of substantial restoration (50 percent or more of the park quiet at least 75–100 percent of the day); methodology involved in measuring and modeling noise impacts; potential impacts of the new rule on safety in the SFRA; effects of the new rule on general aviation; potential adverse impacts of the rule on the economy of Las Vegas and Nevada; adequacy of the consultation process with Native American tribes; and controls on other users of the park vis-à-vis air tour overflights.

Many of the air tour operators, some of whom had also voiced concerns about the safety implications of Notice 96–11, predicted dire economic consequences for the industry if the NPRM, which included possible caps on operations, curfews, and two additional flight-free zones, went into effect. In response to the operators' economic concerns, Senator McCain reminded them that they had unanimously opposed his bill, which became Pub. L. 100–91, in 1987, claiming that it would put the entire industry out of business. Instead, he noted, the number of air tour overflights of Grand Canyon had increased from approximately 40,000 per annum in 1987 to the 95,000 reported by the Arizona Republic newspaper during the 12-month period which ended September 30, 1996.

Aside from a commitment to air safety, perhaps the only issue on which all of the interests represented at the field hearings could agree was the need for quiet aircraft technology incentives for both manufacturers and air tour operators. From Senator McCain and members of the Nevada Congressional delegation to the Native American Indian tribal leaders and from environmental groups to air tour operators and aircraft manufacturers, as well as aviation and tourism industry representatives, quieter aircraft technology incentives were viewed as integral to efforts to substantially restore natural quiet to the Grand Canyon while maintaining a viable air tour industry. Among specific suggestions made were providing more attractive routes to quieter aircraft, setting aside a portion of air tour overflight fees to provide loans to air tour operators to invest in further quiet aircraft technology, and lowering fees for those operators using quieter aircraft.

The FAA has considered the statements made at the hearings in developing this final rule and the Notice of Proposed Rulemaking regarding Noise Limitations for Aircraft Operations in the Vicinity of the Grand Canyon National Park found in this part of today's *Federal Register*.

Consultation with Affected Native American Tribes

The Navajo, Hualapai, and Havasupai Native American reservations border GCNP, and several other tribes have cultural ties to the Grand Canyon. The DOT and DOI have satisfied their obligation to consult with these tribes, on a government-to-government basis concerning the possible effects of this rule, as required under applicable statutes, regulations, and Executive Orders. Although they did not elect to do so, the tribes were invited to participate as cooperating agencies in the environmental review process. Their major concerns were recognition of their sovereignty over the airspace, air access, potential noise increases over tribal lands and religious/historic/cultural sites, and the lack of early coordination during the development of the proposed rule. Both DOT and DOI have addressed tribal concerns, including the effects of the rule on economic opportunities of the tribes, in preparing this final rule. The consultation process, and the mitigation commitments made to address tribal concerns, are described in detail in the final EA, a copy of which has been included in the docket for the final rule.

The consultation process, which began with the development of Notice 96–11, for reduction of aircraft noise, will continue. This will include a dialogue in which potentially affected tribes will have the opportunity to identify, on a confidential basis, any religious, cultural, or historic area that may be potentially affected

by significant noise increases. The FAA has committed to mitigate any such impacts during the development of air tour routes for GCNP.

Public Input

As previously mentioned, on July 31, 1996, the FAA published Notice 96–11 in the *Federal Register* proposing several actions to reduce the impact of aircraft noise on GCNP and assist the NPS in its efforts to substantially restore natural quiet and experience in the park. Interested persons were invited to participate in this rulemaking action by submitting written data, views, or arguments. In response to this notice, the FAA received approximately 14,000 comments. Almost 95 percent of these comments were form letters, or virtual form letters, stating a position either favoring restrictions on air tour overflights or opposing them, with no substantive discussion. While all comments received were considered before issuing this final rule, the specific comments addressed in this preamble are those that contained substantive information.

The following is an analysis of the pertinent general comments received in response to Notice 96–11. Later in the document the FAA has included a section-by-section analysis of the rule, including a discussion of the relevant comments related to each of these sections, and rationale of the final rule.

Discussion of Pertinent General Comments

Comments were received from industry associations (e.g., Grand Canyon Air Tour Council, United States Air Tour Association, Aircraft Owners and Pilots Association, Helicopter Association International); environmental groups (e.g., Sierra Club, National Parks and Conservation Association); air tour operators; aircraft manufacturers; government officials; and Native American tribes (e.g., Havasupai Tribe, Hualapai Tribe).

Approximately one-third of the comments support overflight restrictions to reduce aircraft noise over GCNP. Many of these commenters say that, even with the current SFAR, the noise problem has worsened as the air tour industry has grown. These commenters want to see the proposal strengthened to preserve the natural quiet of the park and recommend permanent caps on the number of air tour flights (based on the number of flights in 1987 when Pub. L. 100–91 was passed); expansion of the flight-free zones; stricter curfews; and incentives for the use of quiet aircraft (combined with caps and curfews).

Approximately two-thirds of the comments oppose further overflight restrictions. These commenters argue that SFAR 50–2 has been successful in reducing noise (as shown by visitor surveys); air tour operations allow everyone access to the park and have less environmental impact on the park than do ground visitors; the proposed flight corridors and flight-free zones could create safety problems by causing denser traffic patterns; and the air tour industry would face severe economic consequences.

Statutory Authorities

A few commenters state that Notice 96–11 is basically allowing the NPS to regulate the airspace over the national parks, thereby diluting the authority of the FAA. Others state that the FAA has no authority to regulate noise over the national parks, that the FA Act (now codified in 49 U.S.C.) authorizes the FAA to regulate safety, and to regulate noise only as it concerns aircraft certification.

Several commenters focus on the authority provided in Pub. L. 100–91. Some of these commenters do not believe that Pub. L. 100–91 gives the FAA the authority to do more than it has already done in issuing SFAR 50–2. One commenter states that since Pub. L. 100–91 requires NPS to submit its report on the effectiveness of the airspace management plan to Congress, only Congress was intended to review the NPS recommendations and provide specific guidance on what further agency action, if any, would be appropriate.

A presenter at the Congressional hearing, as well as an individual from the Navajo Area Office of the BIA commenting to the docket, adds that Pub. L. 102–581 (The Airport and Airway Safety, Capacity, Noise Improvement Transportation Act of 1992) (also related to aircraft noise at the Grand Canyon), called for a report to Congress outlining the FAA's plan to manage increased air traffic over GCNP. As in Pub. L. 100–91, this report would be used only by Congress for any further action. Another commenter states that the FAA and NPS have done only half of the task mandated under Pub. L. 100–91 since they have not yet proposed the air tour routes that will be followed. An air tour operator comments that the proposal does not comply with Pub. L. 100–91 because the statute requires an overflight system that will substantially protect the ground visitor from aircraft noise, while the proposal is based on a standard called percent time audible.

One commenter believes that the FAA has violated the Administrative Procedure Act by not providing a reasonable opportunity for public comment on the meanings of the terms ''natural quiet'' and ''substantial restoration of natural quiet.''

Two commenters state that the proposal violates the Americans With Disabilities Act and provisions of the FA Act that guarantee air access to elderly and disabled persons. Counter to these commenters, another commenter states that most handicapped visitors see the park from the rim overlooks and paved rim trails and that such visitors should not be an excuse for the park's inability to achieve its Congressional mandated goal of substantial restoration of natural quiet.

FAA Response: The FAA has broad authority and responsibility to regulate the operation of aircraft and the use of the navigable airspace and to establish safety standards for and regulate the certification of airmen, aircraft, and air carriers. 49 U.S.C. 40101, *et seq.* Subtitle VII of Title 49 U.S.C. provides guidance to the Administrator in carrying out this responsibility. Moreover, the FAA's authority is not limited to regulation for aviation safety and efficiency.

The FAA has authority to manage the navigable airspace to protect persons and property on the ground. The Administrator is authorized to ''prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes) for— . . . (B) protecting individuals and property on the ground.'' 49 U.S.C. 40103(b)(2). In addition, under 49 U.S.C. 44715(a) the Administrator of the FAA, in consultation with the Environmental Protection Agency, is directed to issue such regulations as the FAA may find necessary to control and abate aircraft noise and sonic boom to ''relieve and protect the public health and welfare.''

The FAA construes these provisions, taken together, to authorize the adoption of this regulation. It is the general policy of the Federal Government that the FAA, like other agencies, will exercise its authority in a manner that will enhance the environment. Section 101 of the National Environmental Policy Act of 1969, as amended 42 U.S.C. 4321 and Executive Order 11514, as amended by Executive Order 11991.

The unambiguous intent of Pub. L. 100–91 with respect to the Grand Canyon was for the FAA to work cooperatively with the NPS to devise a plan that would safely provide for a substantial restoration of natural quiet while maintaining a viable air tour industry. For this reason Sections 3(b)(3)(A) and (B) provided for an evaluation of the initial plan and any necessary revisions based upon that evaluation. Because the report recommended regulatory action rather than legislative action, the FAA was not constrained to wait for Congressional response. For GCNP, the law specifically addressed the substantial restoration of natural quiet, not the protection of ground visitors.

Public Law 102–581 required the FAA to submit to Congress a report on increased air traffic over GCNP. This report, like the report required to be submitted by Pub. L. 100–91, did not limit the ability of the FAA to use its general regulatory authority to take appropriate actions in implementing provisions of either report. Indeed, Pub. L. 102–581 specifically requires a plan of action to ''manage increased air traffic over Grand Canyon National Park to ensure aviation safety and to meet the requirements established by such Section 3 of the Act of August 18, 1987, including any measures to encourage or require the use of quiet aircraft technology by commercial air tour operators.'' Public Law 102–581, Section 134(b)(4).

Both the FAA and NPS recognize that additional work will be necessary in delineation of air tour routes to be followed as well as other actions. In consultation with the NPS, FAA has proposed air tour routes in a separate notice issued concurrently with this final rule. Additionally, in a separate Notice of Proposed Rulemaking issued today, further actions to facilitate the substantial restoration of natural quiet to the Grand Canyon have been proposed. Both this final rule and the NPRM acknowledge the need for the development of a Noise Management Plan to further mitigate impacts from commercial overflights. These actions are also taken in full recognition that the restoration of natural quiet to the Canyon will require these additional steps to meet the definitions established for natural quiet. The rationale for the establishment of the percent time audible is included in the NPS report to Congress. While this methodology may differ from some measurements, it assures protection of the ground visitor from aircraft noise. Furthermore, the threshold of audibility used in the NPS model is louder than the level which would be detected by an attentive listener, guaranteeing that virtually all visitors would notice the noise while engaged in normal visitor activities.

The terms ''natural quiet'' and ''substantial restoration of natural quiet'' are taken from language in Pub. L. 100–91. These terms were defined in the Report to Congress issued by the NPS under the direction of that Act. That report has been available to the public and its role in the development of this regulatory proposal has been clearly defined in previous notices, including the ANPRM on this rule. The concepts of ''natural quiet'' and ''substantial restoration of natural quiet'' have been the subject

of academic research, agency disclosure and adversarial dialogue for a number of years and are used as recognized technical benchmarks in the analysis of the effects of this rule. As such, the terms do not need additional comment under the Administrative Procedure Act.

In addition, the Grand Canyon Enlargement Act specifically provides that the Department of Interior shall submit to the FAA and EPA pursuant to 49 U.S.C. 44715 any recommendations for rules or regulations or other actions he believes appropriate to protect the public health, welfare, and safety or natural environment within the park. After reviewing the submission of the Secretary, the FAA is to take appropriate action.

This action does not violate provisions of the Americans with Disabilities Act or any other guarantees of air access to elderly or disabled persons. The disabled and the elderly will still have a variety of opportunities to view the Grand Canyon by air. In addition, opportunities for ground visits to GCNP will also be as available as they are at present. Provisions for ground access include issuance of special permits to the elderly and handicapped for access to areas closed to automobiles at certain times of the year. Visitor facilities within the park, including overnight accommodations, restaurants and developments are accessible to the handicapped and the elderly.

Impact on Tribal Lands

An individual from a local office of the Bureau of Indian Affairs (BIA) and representatives of Native American tribes affected by this rulemaking state that the FAA and NPS have violated certain treaties, statutes, and Executive Orders by not consulting with the affected tribes during the development of Notice 96–11 and by not analyzing the impact the proposed rule would have on these tribes and their lands.

FAA Response: The FAA disagrees that treaties, statutes, and executive orders have been violated by not consulting with affected Native American tribes. Public involvement is an important part of the rulemaking process. Public hearing activities have included public meetings with interested parties and consultation with Native Americans. The FAA has not yet received concurrence from the Arizona Historic Preservation Officer and the Tribal Historic Preservation Office for the Hualapai Tribe in a determination of no adverse effect pursuant to Section 106. The FAA will continue to consult and work with Native American Nations and Tribes during development of the air tour routes to address any requested measures to minimize noise increases over specifically identified traditional cultural sites as part of the Section 106 process. This includes areas potentially affected by traffic and air tour routes outside the flight-free zones.

An initial determination of no adverse effect by the FAA was based upon an analysis of cultural resources in the vicinity of the GCNP as identified by the NPS and knowledge shared by Native American tribes with contemporary and ancestral involvement with the Grand Canyon. Native Americans tribes may have been reluctant to identify the locations of other specific sites of concern due to a desire to limit public access and preserve their sacred character and integrity. The FAA commits to preserve the confidentiality of the locations of any specifically identified traditional cultural sites that the Native Americans elect to disclose to the FAA during consultation to establish the air tour routes. The FAA further commits to complete Section 106 consultation before it finalizes and permanently implements the air tour routes and to adopt all measures necessary to support a determination of no adverse effect. The FAA will also adopt all measures necessary to assure that the routes developed to implement the proposed final rule do not substantially interfere with the use of sacred religious sites of the Native American tribes in the vicinity of the GCNP.

As discussed in detail in Chapter 4.2 of the Environmental Assessment (EA), the FAA will continue to consult and work with Native American Tribes pursuant to Section 106, during development of the air tour routes to address any requested measures to minimize noise increases over traditional cultural properties as part of the Section 106 process. This includes areas potentially affected by traffic and air tour routes outside the flight-free zones, like the 10–12 miles radius around the confluence of the Little Colorado and Colorado Rivers that was identified by the Hopi Tribe.

The FAA will protect any confidentiality requested to limit public access and preserve the character and integrity of sacred sites. The FAA will complete Section 106 consultation before it finalizes and permanently implements the air tour routes and will adopt all measures necessary to support a determination of no adverse effect. The FAA will also adopt all measures necessary to assure that the routes developed to implement the proposed final rule do not substantially interfere with the religious practices of the Native American tribes.

On June 28, 1995, the FAA and NPS jointly published a notice announcing a public meeting to provide the interested parties with an opportunity to comment on improving SFAR 50–2 (60 FR 33452).

The meeting, held on August 30, 1995, yielded 62 speakers representing air tour operators, environmentalists, government, tourist boards, corporations, Native American tribes, and other individuals. An additional 349 public comments were subsequently received during the comment period that ended on September 8, 1995.

The FAA sponsored public meetings, in Scottsdale, Arizona, on September 16 and Las Vegas, Nevada, on September 19, 1996, to receive comments on the NPRM. These meetings were announced in the *Federal Register* on August 30 (61 FR 45921) and in newspapers in Phoenix, Flagstaff, and Kingman, Arizona, and Las Vegas, Nevada, on several dates in early September.

On August 27 and 28, 1996, the FAA hosted a meeting in Flagstaff, Arizona, at which tribal representatives were given the opportunity to express their views on the rule. FAA invited two representatives each from the Hualapai, Havasupai, Hopi, San Juan Southern Paiute, Paiute of Utah, and Kaibab Piaute Tribes, the Pueblo of Zuni, and the Navajo Nation. During the meetings, the Native American representatives were given a detailed briefing by the FAA on changes proposed in the NPRM. Following the briefing, there was a question-and-answer session where FAA and NPS representatives fielded questions on the revised rule. Minutes of the meeting were provided to each tribe that was invited.

Subsequently, from October 14 to 21, 1996, representatives of the FAA met on-site in Arizona, New Mexico, and Utah with representatives of each tribe to further assess the concerns of the Native Americans. Each tribe was offered a briefing on the proposed rule and given the opportunity to ask questions of the FAA representatives.

Other opportunities have been provided for the tribes to make their views known to the DOT. The Hualapai Tribe submitted comments to the Advance Notice for Proposed Rulemaking (ANPRM) jointly issued by the DOT and DOI. One member of the Hualapai Tribe spoke at the Flagstaff public meeting, and the Hualapai Tribe submitted written comments in response to the public meeting. The Hualapai Tribe commented on the need for a socio-economic analysis of the proposed flight restrictions on the Hualapai Nation. The Chairman of the Hualapai Tribe spoke at the Las Vegas public meeting. Written comments have been received into the docket from the Hualapai, Hopi, and Havasupai Tribes.

Additionally, informal discussions covering aircraft overflight matters, among other issues, have taken place between NPS personnel and tribal leaders locally. The DOT and the DOI have received correspondence identifying interests of the Hualapai Tribe, and the DOT and the FAA met with Hualapai leaders on several occasions and heard first hand many of their specific concerns.

Special Federal Aviation Regulation No. 50–2

Several commenters believe that SFAR 50–2 is working and further regulation is not necessary. According to these commenters complaints about noise have been practically eliminated and no accidents have occurred since the SFAR's implementation. Environmentalist groups, however, state that while SFAR 50–2 has improved natural quiet in the front country, erosion of natural quiet is occurring in the backcountry. According to these commenters, Notice 96–11 does not bring GCNP into compliance with Pub. L. 100–91.

FAA Response: Notwithstanding the value of SFAR 50–2, this regulatory action responds to a clear legislative mandate to substantially restore natural quiet, expressed in Pub. L. 100–91. As discussed in Notice 96–11, the NPS Report to Congress was based on a number of studies evaluating whether SFAR 50–2 resulted in a substantial restoration of natural quiet. NPS found that, while flight-free zones have helped to limit the areas where aircraft are audible, aircraft of all types are still audible for some percentage of the time at virtually all areas where sound data were collected. NPS also found a correlation between the percentage of time that aircraft are audible and how visitors feel about aircraft sound. Even when aircraft are audible for relatively low percentages of the time, some visitors notice the aircraft and believe that the sound has interfered with their appreciation of natural quiet. Finally, in its Report to Congress, the NPS indicated that if no changes are made to SFAR 50–2, progress to date in the restoration of natural quiet will be lost due to an increase in air tour operations. An NPS analysis using 1989 FAA survey data of commercial sightseeing route activity indicated that 43 percent of GCNP met the NPS criterion for substantially restoring natural quiet. However, a subsequent NPS analysis using 1995 FAA survey data indicated that 31 percent of GCNP met the NPS criterion for substantially restoring natural quiet. These findings led the NPS to conclude that the noise mitigation benefits of SFAR 50–2 are being significantly eroded.

These findings indicate that the current SFAR was not sufficiently adequate in substantially restoring the natural quiet to GCNP. The FAA believes that further regulatory action is therefore necessary to best ensure the substantial restoration of the natural quiet as called for by Pub. L. 100–91. Additionally, substantial restoration of natural quiet will be further advanced by the NPRM and Notice of Availability

of Proposed Commercial Air Tour Routes for Grand Canyon National Park and the Comprehensive Noise Management Plan.

Restoration of Natural Quiet

While some commenters are concerned that the proposed action goes too far in regulating the air tour industry in order to satisfy a small group of park users, others believe that it does not go far enough. Some commenters state that the proposal, at best, would only modestly improve natural quiet. Other comments are concerned that "overregulation" in this instance would set a precedent for national parks all over the country.

Another commenter states that the proposal would not achieve the goal of Pub. L. 100–91 because it would not meet the NPS definition of "natural quiet." According to some commenters the NPS definition of "substantial restoration of natural quiet" is not supported by Pub. L. 100–91 or the Congressional Record. According to these commenters NPS has separated the concept of "natural quiet" from complaints from park visitors by making "natural quiet" a park resource that must be protected whether noise is disturbing park visitors or not. These commenters object to the NPS definition and to using it as a justification for rulemaking. One commenter states that the FAA is on record as having concerns about the NPS definition and recommends withdrawal of Notice 96–11 until the FAA develops a proposed definition and invites comment.

One commenter finds the NPS definition too liberal since it allows half the park to be noisy 25 percent of the day and the other half 100 percent of the day. A presenter at the Congressional hearing says that the intent of Pub. L. 100–91 was to restore the natural quiet within the flight-free zones only and not the entire park.

The Grand Canyon Air Tour Council (GCATC), which represents a number of air tour operators, states that, because the proposed restrictions do not apply to NPS-operated and other non-tour aircraft (e.g., military, Native American reservations), these aircraft could consume the entire 25 percent audible aircraft cap as defined in "substantial restoration of natural quiet." Thus, air tour operators would be even further restricted.

FAA Response: The NPS defined "natural quiet" and identified it as a natural resource in its 1986 "Aircraft Management Plan Environmental Assessment for Grand Canyon National Park" which underwent extensive public review in 1986 (i.e., "the absence of man-made sounds . . . considered a natural resource"). The term was subsequently discussed in numerous public documents, which have also undergone public review, including NPS Management Policies (1988), and the Advance Notice of Proposed Rulemaking (ANPRM) concerning Overflights of Units of the National Park System published in the *Federal Register* on March 17, 1994.

The authority of the NPS to define the "substantial restoration of natural quiet" is recognized in Pub. L. 100–91, Pub. L. 102–581, and in the general authorities of the NPS. The NPS's Management Policies (1988, page 1:3) states that the terms "park resources and values" refer to the "full spectrum of tangible and intangible attributes", including "intangible qualities" such as natural quiet, for which parks have been established and are being managed. National park areas are set aside to preserve their resources as well as their special qualities and experiences unimpaired for the enjoyment of present and future generations. The NPS has the authority and responsibility to manage these areas, including their resources, values and visitors.

The NPS definition of "substantial restoration of natural quiet" involves time, area, and acoustic components. Because many park visitors typically spend limited time in particular sound environments during specific park visits, the amount of aircraft noise present during those specific time periods can have great implications for the visitor's opportunity to experience natural quiet in those particular times and spaces. Those visitors with longer exposures, such as backcountry and river users, have more opportunity to experience a greater variety of natural ambient and aircraft sound conditions, but typically they move through a number of sound environments. Based on its studies, the NPS concluded that the visitors' opportunity to experience natural quiet during their visits and the extent of noise impact depends on a number of factors. These factors include the number of flights, the sound levels of those aircraft, as well as other sound sources at the natural sound environment, and the duration (or amount of time) during that visit that aircraft were audible in specific locations. Integrated measures of noise (such as DNL and L_{eq}) are commonly used to quantify time varying noises such as are described above. Most of the FAA's experience has been in assessing noise impacts in airport and residential environments where people are exposed to a variety of sound conditions in the same basic sound environment over a very long period of time. However, because park environments and the set of conditions typically experienced by park visitors is completely different, the NPS concluded that these integrated measures were, by themselves, inadequate to represent the effect of overflights on park environments and a person's

visit. However, the FAA and the NPS agree that L_{eq} integrated over a short time period correlates with park visits and can be useful in assessing park noise impacts.

This action only considers the air tour contribution to the GCNP noise. In other words, noise contributed from other sources is treated separately for purposes of noise modeling analysis.

The NPS will continue to strictly control its rescue, law enforcement, maintenance and critical resource management overflights to minimize their number and effect on park resources and visitors. These flights are made for lifesaving and essential management purposes and will not be a factor in any restrictions on air tour operations.

Discrimination Against Air Tourists vs. Other Users

A number of commenters state that SFAR 50–2 and Notice 96–11 discriminate against air tour visitors to the park, who have little environmental impact on the park, while ignoring the noise, litter, and pollution problems associated with ground users. A few commenters believe that NPS is purposely trying to eliminate air tours from the park. Other commenters point out that air tour visitors are not being discriminated against since all commercial enterprises that use the Grand Canyon are restricted.

FAA Response: The FAA does not agree. The actions by the FAA in addressing mitigation measures associated with noise from commercial air tour operations is additive to actions being taken by the NPS to preserve and protect for future generations the resources of GCNP. Recent actions include the development of a General Management Plan which will greatly restrict automobile use in congested rim areas, provide high occupancy public transit, and establish pedestrian and bicycle trails. Other actions have included restrictions on the operation of diesel buses, on diesel and steam locomotives serving the park, and on outboard engines on river rafts. In addition, the NPS has a long standing administrative practice in the control and mitigation of impacts to resources resulting from visitation through the use of reservation systems for campgrounds and other sites both on the rim and in the inner canyon, as well as providing for times when use types are restricted, such as the "oar only" season for rafting on the Colorado River. As such, use allocation is a common practice within NPS areas in order to meet the demands of the general provisions of acts relating to the administration of National Park Service Areas (16 U.S.C. 1 *et seq.*) as well as specific park legislation such as Pub. L. 100–91.

Further, it was not the intent of Pub. L. 100–91 to ban aircraft from overflying the Grand Canyon. In this regard, the FAA believes that viewing of the canyon from the air is a legitimate and valuable means of appreciating the beauty of the Grand Canyon. This policy is supported by the legislative history of Pub. L. 100–91 and the objectives states by DOI in its December 1987 recommendations to the FAA. The agency further believes that the resources of the canyon can be protected without an exclusion of aircraft, which would have a major adverse impact on air travel through this area of the southwest. It is the intent of the rule adopted to permit the continuation of aerial viewing of the canyon, and air travel through the area, in a manner consistent with the stated purposes of Section 3 of Pub. L. 100–91 to substantially restore the natural quiet of the Grand Canyon within the boundaries of the national park.

The NPS has had a consistent position for years regarding air tours at the Grand Canyon. As stated on page 184 of the 1994 NPS Report to Congress, one of the six management objectives for the park is: "Provide a quality aerial viewing experience while protecting park resources (including natural quiet) and minimizing conflicts with other park visitors."

Number of Operators and Operator Fees

An environmentalist group states that one third of the Grand Canyon air tour operators dodge fees and that air tour numbers may be twice those reported. Another commenter stated that tribes in the GCNP vicinity should be able to regulate and collect fees for the airspace on their lands as the NPS does.

FAA Response: Fee collection is beyond the scope of Notice 96–11. Through the 1993 Omnibus Budget Reconciliation Act, Congressional action required the NPS to collect a commercial tour use fee of $25 for aircraft with 25 seats or less and $50 for aircraft with more than 25 seats. Collection and enforcement of this fee is the responsibility of the NPS and the NPS can use all information available to assure that fees are collected in accordance with the law. Nevertheless, payment of fees has no direct relationship to this rule. Regarding the collection of fees by Native Americans, Congressional action would be required to authorize the collection of an overflight fee.

Noise Level Surveys, Monitoring, Studies, and Modeling

Some commenters state that the NPS overstated the impact of air tour overflights on park visitors in its 1992 visitor survey. For example, the commenter noted that backcountry users do not venture out of the Bright Angel Flight-Free Zone, and some complaints were collected at a time when an aerial search was being made for an escaped convict and NPS service flights were on-going. Furthermore, the commenters complained that the NPS made no attempt to distinguish what type of flights were causing the annoyance.

Other commenters state that the NPS-solicited surveys show an unusually high number of complaints because more complaints are received from solicited surveys than from unsolicited reports.

Another commenter says that some of the survey questions were biased because they used the word "noise" instead of "sound" (e.g., visitor perceptions of aircraft noise versus aircraft sound).

Industry commenters also express doubts about the noise monitoring studies contracted by the NPS. Several commenters state that monitoring sites were directly under, or in close proximity to, the tour routes flown by air tour operators as directed by SFAR 50–2.

Several commenters state that although Pub. L. 100–91 directed the NPS to distinguish between the impacts caused by sightseeing aircraft and other types of aircraft, the noise monitoring results do not distinguish the amount of noise attributable to different types of aircraft.

Industry commenters also object to the NPS model for noise. One commenter states that the noise model used for establishing predicted aircraft noise impacts eliminated the coefficient of lateral over-the-ground attenuation. BIA states that the NPS established no baseline other than ambient sound levels, which does not differentiate among the impacts on visitors from different types of flights. Another commenter states that the noise analysis is flawed because it was based on NPS estimates of fleet sizes, aircraft use levels, and certificated noise levels for aircraft in that fleet, which do not necessarily indicate the actual noise an aircraft will produce in flight.

FAA Response: The NPS noise level surveys, dose-response studies, and acoustic modeling were conducted by internationally-respected acoustical research firms known for the quality of their work. These firms advised the agency on the design, analysis, and conduct of these surveys and studies. The NPS consulted extensively with these firms to ensure that the conclusions in the NPS Report to Congress were drawn directly from study results. The studies were based on standard research methodologies, including statistically valid random samples, and have been reviewed by scientists not affiliated with the NPS or the FAA. They represent the only large-scale, scientifically sound studies of park noise environments and park visitor reactions to aircraft noise in outdoor recreation settings.

Acoustic modeling is the accepted approach for addressing noise concerns over large areas such as Grand Canyon. Noise level measurements only reflect individual site conditions but can be productively used to improve the accuracy of the modeling. Both the FAA and NPS used a standard aircraft noise database and made adjustments based on actual field measurements. The measured ambient background sound levels (the baseline for natural quiet taken from Grand Canyon noise level measurements) were factored into FAA and NPS modeling efforts, and both models were able to factor in terrain effects, albeit to different extents. Finally, data from an FAA survey of air tour operators was used by both agencies to provide the aircraft types, numbers, and routes used in the acoustic modeling. Although the FAA and NPS noise models are quite different, the FAA found sufficient convergence in modeling results to suggest that valid conclusions can be drawn from both models.

NPS acoustic measurements found that the sound of aircraft was measurable for some part of the time at virtually all areas where sound data was collected, including a wide variety of locations and environments well within the flight-free zones as well as near the flight routes. This is consistent with NPS modeling which suggested that aircraft sound can carry 13–16 miles in the eastern end of the Canyon and even further on the western end—enough to fully penetrate to the center of every flight-free zone created by SFAR 50–2.

Results from the 1992 survey show that almost 75 percent of fall backcountry and river oar visitors who heard aircraft responded that they were moderately to extremely annoyed (NPS Report to Congress, Page 139). The NPS did not anticipate this level of annoyance from groups supposedly protected by the SFAR and was an important indication to the NPS that additional action was needed to protect quiet in the park. For all categories of visitors, the stronger category "interference," was selected more frequently than the weaker category, "annoyance." Of the visitors who heard aircraft, over 90 percent of fall backcountry visitors and 100 percent of river oar visitors responded that aircraft noise interfered with their appreciation of natural quiet (NPS Report to Congress, Page 192). Both the dose-response study and the survey found visitor results varied by activity and site.

Aircraft noise is the subject of the second largest number of complaints in the park. Complaints are an indicator that a problem may exist, but scientifically valid surveys have been consistently shown to be necessary to accurately measure visitor reactions.

The NPS found that noise from the air tour routes in place under SFAR 50–2 is clearly audible (and was measured) from many locations within flight-free zones, accounting for the results cited by some commenters. The search for the escaped convict referred to did not affect the study which was suspended during that period.

NPS-contracted acoustic monitoring was conducted with a technician recording the type of aircraft observed and measured. The tour flights all occurred on standard routes and altitudes and were easy to separate from any other aircraft, such as NPS flights and high altitude commercial jets. In fact, pages 187–188 of the NPS Report to Congress provide a breakdown of the amount of time aircraft were audible by aircraft type during the study, and also show the variety of sites both within flight-free zones and under or near flight corridors.

In the NPS deliberations that led to development of the survey questions the question of inducing bias by the use of terms, or by the wording or sequence of questions, was very carefully considered and tested before the study. The term "noise" was used in the survey questionnaires very carefully to allow correlations with the large body of aircraft noise research conducted primarily in airport environs. The term "sound" was used where possible, and the analysis of the responses suggested that the terms did not affect the results.

The data and the modeling on which the proposed rule is based are scientifically valid and the best available. The monitoring program resulting from this rule will also provide additional data which will help to further validate and refine the modeling.

In formulating the Comprehensive Noise Management Plan for GCNP, the FAA and the NPS expect to conduct further research regarding visitors' reactions to noise and natural quiet issues to validate the current studies and the two agencies' respective modeling systems.

Section-by-Section Discussion of Final Rule

The following is a brief summary of the major proposals, and the comments, received. The FAA's response to those comments and the final rule action follow.

Section 93.301 Applicability

Proposed § 93.301 described the lateral and vertical dimensions of the SFRA. Notice 96–11 solicited comments on modifying the dimensions of the SFRA by extending the SFRA north-northeast of the confluence of the Little Colorado and Colorado Rivers; extending the SFRA southward below the Bright Angel and Desert View Flight-Free Zones; extending the SFRA at the western edge to cover that portion of the Grand Wash Cliffs in the park that was inadvertently omitted from the 1987 NPS Grand Canyon Aircraft Management Recommendation and the original rule; and increasing the altitude of the SFRA ceiling from 14,499 to 17,999 feet MSL.

Comments

Heli USA states that the revised SFRA could affect access to the Grand Canyon West airport.

An individual from the Navajo Area Office of the BIA says that the extension of the SFRA to the north-northeast of the Little Colorado and Colorado Rivers would introduce air traffic into an area outside the current SFRA, over the Marble Canyon and Navajo land, which did not have traffic before.

The Experimental Aircraft Association (EAA), the General Aviation Manufacturers Association (GAMA), and the Aircraft Owners and Pilots Association (AOPA) object to the proposed extension of the SFRA ceiling. EAA states that the FAA has not presented any information showing that any commercial sightseeing aircraft are using or plan to use these altitudes. GAMA says that requiring turbo-charged piston-engine and turboprop turbine-powered aircraft that have optimum operating altitudes between 14,500 and 17,000 feet to take alternate routes around the SFRA will add considerable costs to implementing the rule. AOPA says that the proposed requirement is discriminatory towards general aviation because it forces all general aviation flights over the Grand Canyon to take place at a higher altitude than flights by commercial air tour operators.

Another commenter says that Notice 96–11 is counter to FAA's General Aviation Policy Statement (adopted by the FAA Administrator in 1995), which calls for fostering general aviation and maintaining safety through voluntary compliance and other means to reduce the regulatory burden on general aviation.

Another commenter contends that Notice 96–11 will impact many other aircraft who operate across Northern Arizona between 14,500 MSL and the base of Class A airspace under VFR. The commenter adds that increasing the SFRA altitude would make it impossible to fly over the SFRA without obtaining an ATC clearance to operate in Class A airspace.

The Soaring Society of America, Inc. (SSA) opposes the proposed rule as it applies to quiet and unobtrusive civil aircraft such as sailplanes and gliders. Since airplane and helicopter sightseeing overflights are the perceived cause of the noise problem in the Grand Canyon, the SSA believes the regulations should be tailored specifically toward such aircraft and the FAA should permit sailplanes and gliders to continue to operate under the current SFAR 50–2. SSA refers to the Department of the Interior's *Report on Effects of Aircraft Overflights on the National Park System* which suggests to that society that sailplane "noise" is approximately equal to daytime ambient noise, therefore nothing will be gained by burdening sailplanes and gliders with the proposed rule.

FAA Response and Final Rule Action: In 1989, the FAA revised the southern boundaries of the SFRA in the West Canyon area to establish a corridor to the Grand Canyon West Canyon Airport. This corridor was designed to permit access to the airport to assist the economic development of the Hualapai tribes. Nothing in this final rule modifies the corridor that was established in 1989. The FAA will reserve its response to comments regarding specific routes until after the comment period closes for the Notice of Proposed Routes.

Increasing the SFRA ceiling from 14,499 feet MSL upward to but not including 18,000 feet MSL is intended to prevent commercial sightseeing operators from circumventing the intent of this rule by overflying the fly free zones between 14,500 feet MSL and 17,999 feet MSL.

The upward expansion of the SFRA does not impose a barrier to general aviation aircraft. The effect of the expansion is to regulate commercial sightseeing flight operations pursuant to § 93.315 which permits only those operations authorized in operations specifications.

The Grand Canyon attracts an unusual level of air traffic. The FAA continues to be concerned that safety could be impacted by the concentration of air traffic, including powered and nonpowered aircraft over GCNP. Therefore, it opts not to relax SFRA operating requirements for sailplanes and gliders. The FAA adopts the SFRA as proposed.

Section 93.305 Flight-Free Zones and Flight Corridors

Proposed § 93.305 described the lateral and vertical dimensions of the proposed flight-free zones; proposed creating two new flight-free zones: The Sanup Flight-Free Zone and the Marble Canyon Flight-Free Zone; proposed merging the Toroweap/Thunder River and Shinumo Flight-Free Zones and extending this zone to the park boundary; proposed expanding Desert View Flight-Free Zone to the north and east to the GCNP boundary; and proposed extending the current Bright Angel Flight-Free Zone to the north to the GCNP boundary.

Proposed § 93.305 also described the five flight corridors that allow access through the canyon area for general aviation and transient operations and routes for commercial sightseeing flights.

The FAA proposed to add two new flight corridors in the proposed Marble Canyon Flight-Free Zone. In addition, the FAA proposed to close the Fossil Canyon Corridor, extend the Zuni Point Corridor into a Y-shape in the north, and shift the southern portion of Dragon Corridor to the west. The FAA also proposed that commercial sightseeing aircraft would be allowed to operate in only one direction in the Zuni Point Corridor.

General Comments on Flight-Free Zones and Flight Corridors

Safety Comments: Several commenters express concerns about safety if the proposed rule is implemented. According to these commenters, the combination of restricted corridors, changes in route structure, and curfews would increase the density of aircraft in the available airspace, thereby increasing the potential for a mid-air collision.

The NTSB commented that the compression of air traffic into smaller airspace would limit safe maneuverability in marginal weather conditions, funnel air traffic into fewer routes, and in some areas, compress slower single-engine airplanes, helicopters, and higher performance airplanes into the same airspace. This would increase the likelihood of midair collisions in GCNP. The NTSB adds that the FAA should systematically analyze the possible effects of the proposed changes on air safety and ensure that these results are considered before adopting the proposal.

One commenter disagrees with the claim that the proposed rule would create an unsafe environment. The commenter points to the FAA's 1995 Report to Congress, "Report on the Study on Increased

Air Traffic over Grand Canyon National Park," which states that it would be highly unlikely that operations would ever approach saturation level. The commenter also points out that the proposed rule allows pilots to make evasive flight maneuvers necessary to maintain safety.

General Aviation: One commenter objects to the proposed flight-free zones because they will effectively ban general aviation from flying over the park. The average general aviation aircraft is not equipped to operate at the minimum altitudes required by the proposal. According to the commenter, the proposed new flight-free areas will prohibit general aviation aircraft from flying directly from Las Vegas to either Albuquerque or Farmington. The commenter asks that general aviation aircraft be allowed to overfly the flight-free areas at altitudes above 10,499 MSL.

Native American Tribal Lands: In a statement given at the Congressional hearing, representatives of the Havasupai Tribe say that a foreseeable result of the proposed changes will push overflights south of GCNP resulting in adverse environmental effects. In a comment subsequently submitted to the docket, representatives of this Tribe say that while reducing the negative impacts of overflights by regulating the airspace within the park is worthwhile, the result will be to increase aircraft noise outside the park, including the Havasupai reservation. The commenter adds that there has been no analysis of the environmental effects of these regulations outside the park boundaries and that "the FAA's unjustified rush to action must be slowed."

Other General Comments: Two commenters remind the FAA that flight-free zones are not noise free zones since noise travels 13 to 16 miles; nor are they entirely flight-free since high flying aircraft still overfly them. These commenters point out that while flight corridors are necessary, they are not a solution for the noise problem since they heavily affect several scenic areas in the park, such as Point Imperial, Nankoweap, Cape Final, Unkar, Hermit, Boucher, and Crystal Rapids trails.

FAA Response and Final Rule Action: The comments regarding safety express similar concerns: (1) Flight-free zones require changes to routes, (2) flight-free zones create smaller available airspace, (3) the effect of curfews on the density of air traffic, (4) increased possibility of midair collisions because of route changes and combining aircraft of differing flight characteristics. Each of these general areas of concern will be addressed separately.

Flight-free zones require changes to routes: The modified and new flight-free zones are necessary to comply with the mandate of Pub. L. 100–91 to achieve substantial restoration of the natural quiet in GCNP. One of the primary responsibilities of the Las Vegas Flight Standards District Office (FSDO), through a special unit, is to provide oversight of the commercial sightseeing operators in the Grand Canyon. The members of this unit are all highly experienced with this subject and have worked closely with the commercial sightseeing operators and the NPS. The Notice of Availability of Proposed Air Tour Routes of GCNP (Notice of Proposed Routes), which is published simultaneously with this final rule, explains how interested persons may obtain detailed information on the routes. The FAA will review the comments received from the public related to the notice of proposed routes and if appropriate, make modifications to the routes.

Flight-free zones create smaller available airspace: The FAA agrees with the NTSB that the additional flight-free zones create a smaller airspace for air tour aircraft. The NTSB is concerned that the smaller airspace may limit "safe maneuverability in marginal weather conditions." As in SFAR 50–2, the FAA has specifically included language in § 93.305, Flight-free zones, that will allow air tour aircraft to fly within the flight-free zones "in an emergency or if otherwise necessary for safety of flight." The intent of this language is to allow flight into a flight-free zone for any safety reason including emergencies. This language will also enable pilots to deviate from course to avoid other aircraft and unsafe weather conditions. This provision will be liberally construed when applied in the interests of safety. This should resolve any concern about the ability of an aircraft to maneuver in a smaller available airspace. Additionally, the FAA agrees with a commenter that the airspace has not approached any unsafe saturation level.

The effect of curfews on the density of air traffic: The FAA agrees that curfews on the west end of GCNP might create a situation whereby large numbers of aircraft could attempt to enter the air tour routes at the same time and along the same routes. Based on the FAA's safety analysis of the air tour flights originating from the Las Vegas area, the FAA has decided to exempt the routes beginning on the western end of the park from any curfew.

However, § 93.316(a) prescribes a fixed curfew. Specifically, no person shall conduct commercial sightseeing operations within the Dragon and Zuni Corridors during the following periods. (1) Summer season (May 1–September 30)—6 p.m. to 8 a.m. daily; and (2) Winter season (October 1–April 30)—5 p.m. to 9 a.m. daily. (See discussion later in the document.)

Increased possibility of midair collisions because of the changes and combining aircraft of differing flight characteristics: In light of these concerns the FAA will change the flow of traffic along the routes on the eastern side of the park (e.g., Dragon corridor) to a clockwise direction. This change will prevent conflict with aircraft merging from other existing and proposed routes. Also, the clockwise direction was designed for other safety reasons. (See discussion/response on Zuni Corridor.) More detail is contained in the Notice of Proposed Routes that is being published simultaneously with this final rule. Regarding combining aircraft of differing flight characteristics, the FAA will continue its practice of separating fixed-wing aircraft from rotary-wing aircraft through altitude restrictions. Experience, cooperation, and a proactive partnership developed between the commercial sightseeing operators and the FAA resulted in flight procedures that are included in the operator's FAA approved operations manual. The FAA believes that these established procedures will prevent potential conflicts.

Likewise, for safety, the rule continues to segregate commercial sightseeing operations from general aviation/transient operations in the SFRA. Commercial operators, under their operations specifications, are held to a higher operational proficiency standard that addresses the complexities of the route systems, terrain, flight corridors, weather norms, etc. It would be unrealistic to impose an equally high proficiency standard for the occasional general aviation pilot. Therefore, the FAA continues to believe that it is necessary to segregate these communities of operators.

General Comments on Commercial Air Tour Routes

Several commenters state that it is difficult to comment on the effects of the proposed changes since the proposed routes are not included in Notice 96–11. Nevertheless, the FAA received some general comments on potential route changes. Twin Otter says that the FAA has not proposed one quieter aircraft route, even though the NPS had proposed, in its Report to Congress, that some flight tour routes be restricted to "quiet aircraft only."

Southwest Safaris says the helicopter operations have been given preferential treatment by the FAA. They are allowed to fly from 500 to 1,500 feet lower than fixed-wing aircraft and to fly shorter routes in the middle of the park. According to the commenter, helicopter tours are on the rise and constitute much of the noise problem.

FAA Response and Final Rule Action: The FAA agrees with the comments that the operators should have an opportunity to comment on proposed routes. Simultaneously with this final rule, the FAA is publishing a Notice of Proposed Routes, which includes the proposed tour routes within the Grand Canyon. Operators will have an opportunity to comment on the proposed routes. The FAA will reserve its response to comments regarding specific routes until after the comment period closes for the Notice of Proposed Routes.

Regarding routes for "quiet aircraft," simultaneously with the final rule, the FAA is publishing an NPRM, Noise Limitations for Aircraft Operations in the Vicinity of the Grand Canyon National Park, which proposes certain routes that will be limited to noise efficient aircraft only.

The FAA disagrees with the comment that helicopter operations have been given preferential treatment. Regarding altitude, the FAA's long-standing policy is to separate helicopters and fixed-wing aircraft because the two classes of aircraft generally have vastly different flight characteristics. Traditionally helicopters, normally slower and more maneuverable than fixed-wing aircraft, have been allowed to fly lower. The FAA intends to continue this safety rationale.

Comments on Marble Canyon Flight-Free Zone—Navajo Bridge and North Canyon Corridors

Three commenters support the Marble Canyon Flight-Free Zone. The Sierra Club-Grand Canyon Chapter states that the flight-free zone would be of particular benefit, particularly to fishers and river runners, and believes that the rim rather than the river bank should be the eastern boundary of the flight-free zone.

Another commenter suggests that the proposed Marble Canyon Flight-Free Zone be modified to protect significant locations such as Blue Spring or other sacred places in the Little Colorado vicinity. Also, according to the commenter, no flights should be allowed over popular side canyon attractions such as North Canyon, South Canyon, Silver Grotto, and Saddle Canyon.

EAA states that the top of all three sections of this flight-free zone should be reduced from 14,000 to 8,500 feet MSL to allow general aviation flights between Las Vegas, Nevada and Farmington, New Mexico.

Twin Otter states that the flight-free zone is too small to be meaningful and would eliminate a popular air tour route.

FAA Response and Final Rule Action: The FAA has reconsidered its proposal for the Marble Canyon flight-free zone in light of the comments received. The FAA has determined that the proposed flight-free zone would provide only a minimal noise mitigation benefit because of the narrow dimensions. In addition, the FAA agrees that the proposed zone could have impacted general aviation flights between Las Vegas and Farmington. Therefore, the final rule eliminates the Marble Canyon Flight-Free Zone.

However, the FAA is modifying the minimum sector altitude for this area. (See discussion under § 93.307, Minimum Flight Altitudes.)

Comments on Desert View Flight-Free Zone and Zuni Point Corridor

Several commenters state that making Zuni Point Corridor one-way may present safety problems due to inclement weather and unexpected weather changes in the north canyon. GCATA states that because of the lack of a weather reporting station on the north rim, tour pilots proceeding through the Zuni Point Corridor will be required to make weather decisions in the vicinity of the "Y" on what direction to proceed.

Papillon states that the noise problem over the area between the Little Colorado River confluence and Imperial Point has been exacerbated by the piston-driven single and multiengine six to nine passenger airplanes. To clear the north rim, these airplanes climb. When entering the canyon via Zuni Point Corridor, these types of airplanes should enter at a higher level, thus eliminating the noisy climb configuration.

The Sierra Club-Grand Canyon Chapter supports the enlargement of the Desert View Flight-Free Zone (as does NPCA) but states that the Zuni Northwest Corridor cuts though the Critical Noise Sensitive Area that has Point Imperial at its center. This corridor is also a problem for users of the Saddle Mountain-Nankoweap Basin area. The Sierra Club-Angeles Chapter believes that the proposal should close Zuni Point Corridor because it impacts at least six trails, four permanent stream basins, important archaeological and historical sites, and Papago Point, the only major point on the south rim where one could formerly find solitude and escape the sounds of auto traffic.

FAA Response and Final Rule Action: Concurrent with the publication of this final rule, the FAA is publishing a Notice of Proposed Routes discussing route structures and directions of flights. The FAA will consider pertinent comments received in response to Notice 96–11 regarding routes, as well as any additional comments submitted in response to the Notice of Proposed Routes. In response to the perceived safety problems regarding weather, the FAA will route traffic in a clockwise fashion through the Dragon and Zuni Corridors. This flow will allow operators to better observe weather conditions around the North Rim so as to avoid encountering adverse weather condition in the vicinity of the North Rim, e.g., high winds, low visibility, turbulence, etc. The FAA believes this flow will enhance safety by pilots having the opportunity to take appropriate actions to avoid these conditions. Noise mitigation will be an additional benefit, as aircraft will no longer be climbing as they pass near Point Imperial.

Comments on Bright Angel Flight-Free Zone, Zuni Point, and Dragon Corridors

NPCA notes that the NPS has estimated that the one-way restructuring of the Zuni Point Corridor will add 3,800 operations into the Dragon Corridor. Some commenters object to the northern extension of Bright Angel Flight-Free Zone. Two other commenters say that the northern extension will lengthen the distance of the Grand Discovery Tour by 20 percent, which will increase operator costs and require operators to fly over the highest points of the north rim, resulting in frequent weather cancellations.

The Sierra Club-Grand Canyon Chapter supports the enlargement of the Bright Angel Flight-Free Zone. Twin Otter and Grand Canyon Airlines recommend that the Dragon Corridor be converted within 2 years to a quiet airplane flight corridor. The commenters also recommend that the FAA define what operating characteristics an airplane model must have in order for it to conduct round-trip air tours within Dragon Corridor and then immediately permit such fixed-wing air tours within this corridor (just as the FAA now permits out-and-back helicopter tours).

Grand Canyon Airlines states that SFAR 50–2 management policies have encouraged rotorcraft operators to concentrate on Dragon Corridor tours. Since 1994, when helicopter operators began concentrating their tours within the Dragon Corridor, Grand Canyon Airlines has conducted 35 percent fewer air tours in this area. This commenter wants to be permitted to conduct similar round-trip Dragon Corridor tours to remain competitive if the FAA adopts the extension of the north rim air tour route.

Grand Canyon River Guides believes that the out-and-back helicopter route into Dragon Corridor should be abolished. This route allows helicopters to offer a shorter trip which is similar in cost to the least expensive tour of the larger, quieter fixed wing operators which carry more people with much less impact. According to the commenter, this shorter route is causing a very negative trend as noticed by the increased helicopter traffic on the Dragon Corridor with each passing year.

NATA is pleased that Notice 96–11 establishes the dog-leg within the Dragon Corridor because it would route air traffic away from the only location on the rim of the canyon where air tours and ground visitors interact. Papillon also agrees with the proposed change to relocate the south end of Dragon Corridor to the west.

USATA contends that the current routes that air tour operators fly encompass only 17 percent of the entire park. With the Dragon Corridor "dog leg," the front country areas of the park (where 99 percent of all ground users visit) would be 100 percent protected from air tour noise. If flights were to double or even quadruple, one could expect the number of aircraft seen or heard to remain well within reason at a maximum of less than one aircraft per hour.

The Sierra Club—Grand Canyon Chapter, NPCA, and Grand Canyon River Guides do not support the changes to Bright Angel and Toroweap-Shinumo Flight-Free Zones to accommodate the Dragon Corridor dog leg. They argue that these changes would degrade a portion of the park on the south rim that is currently relatively quiet. This area includes Havasupai Point. The Sierra Club suggests extension of the southwest corner of the Bright Angel Flight-Free Zone (from 36°09′31″ N, 112°11′15″ W; to approximately 36°02′35″ N, 112°14′30″ W; then southeast along the GCNP boundary).

The Sierra Club also points out that the seventh point (36°01′16″ N, 112°11′39″ W) should be approximately 36°00′58″ N, 112°11′45″ W.

AOPA says that changes to the Dragon Corridor could make navigation extremely difficult and increase the chance that a pilot could inadvertently transgress into a flight-free zone.

FAA Response and Final Rule Action: Flight-free zones are being expanded and/or modified to aid the substantial restoration of the natural quiet, as mandated by Pub. L. 100–91. As stated by Senator John McCain in the legislative history of Pub. L. 100–91:

The purpose of flight-free areas is to provide a location where visitors can experience the park essentially free from aircraft-sound intrusions. The boundaries of these flight-free zones are meant to be drawn to maximize protection to the backcountry users and other sensitive park resources. The extent of these areas should be adequate to ensure that sound from aircraft traveling adjacent to these zones is not detectable from most locations within the zones. It is within these zones that we expect to achieve the substantial restoration of the natural quiet. (Congressional Record—Senate, p. S10799, July 28, 1987).

The FAA agrees that there should be incentives for operators to convert to noise efficient aircraft in the Dragon Corridor; those incentives are addressed in the NPRM being published simultaneously with this final rule.

The FAA agrees with the Sierra Club that the Bright Angel Flight-Free Zone boundary description is incorrect, and corrects it in this action.

The FAA has adopted the proposed shift to the west in the Dragon Corridor (the "dog-leg") because it provides important noise mitigation to the Hermit's Basin Region and presents no safety concerns. This action responds to requests made by both the majority of the operators and NPS. By leaving the Dragon Corridor open, this action maintains certain viable commercial sightseeing routes over the canyon while providing greater noise mitigation in other parts of the park from larger flight-free zones. The legislative history of Pub. L. 100–91 indicates that it was not the intent of the legislation to ban aircraft from overflying the Grand Canyon.

The change is consistent with the 1987 NPS recommendation and responds to comments made at the Flagstaff public meeting. These changes provide for noise mitigation while supporting a viable industry at the eastern end of the canyon.

The corridors will remain 2 nautical miles wide for commercial sightseeing operations and 4 nautical miles wide for general aviation and transient operations. The addition of a bend or "dog-leg" in the Dragon Corridor will make navigating the corridor a bit more involved but will be manageable. The revised Grand Canyon VFR Aeronautical Chart will contain latitude/longitude and VFR check points to assist pilots navigating in the area. Specifically, the corridor centerline and "turn-point" will be identified electronically via latitude/longitude coordinates. The "turn-point" will be identified by VOR/DME information from the Grand Canyon VOR. And the corridor and "turn-point" will be identified by topographic features as well.

Comments on Toroweap/Shinumo Flight-Free Zone and Tuckup Corridor

Several commenters state that the extension of the Toroweap/Thunder River Flight-Free Zone and the merger of Toroweap/Thunder River with the Shinumo Flight-Free Zone will eliminate certain routes, thus reducing scenic viewing while extending tour times. One commenter adds that this extension is

meaningless because air tour aircraft diverting around National Canyon will still be audible since the flight-free extension is too small for effective noise attenuation.

An individual from the Navajo Area Office of the BIA states that the expansion of Toroweap/ Shinumo Flight-Free Zone will block flight departures on the Brown 3 route from the Bar 10 airstrip which provides river runner support to the Hualapai Tribe.

Several commenters support expansion of the Toroweap/Shinumo Flight-Free Zone and recommend that it be extended even farther back from the south rim to reduce the visual and noise intrusions from air tours. The Sierra Club—Grand Canyon Chapter states this is necessary to address the concern that air tours will fly just outside the flight-free zone boundary over the river corridor. They add that the existing flight-free zone located within a 1.5 nautical mile radius of the Toroweap overlook is inadequate and should be expanded.

The Sierra Club points out an error in the flight-free zone: the second point (112°3′19″ W) should be 112°13′19″ W and the third point (36°02″ N) should be 36°20′02″ N.

FAA Response and Final Rule Action: In analyzing the commenters' statements on the extension of the southern boundary, the FAA believes that the commenters are referring to the Blue 1 route. The FAA is soliciting comments in the NPRM that is published simultaneously with this rule regarding the feasibility of limiting a portion of the Blue 1 route in the National Canyon to noise efficient aircraft.

In response to comments regarding routes, the FAA will consider pertinent comments received in response to Notice 96–11, as well as any additional comments submitted in response to the Notice of Proposed Routes.

Any further expansion of the Toroweap Flight-Free Zone will need to be considered in the context of the Comprehensive Noise Management Plan.

The FAA disagrees that the rule will result in an adverse effect on the safe operation of the Bar 10 airstrip or black river runner flights.

The FAA agrees with the Sierra Club that the Toroweap/Shinumo Flight-Free Zone boundary description is incorrect, and corrects it in this action.

The FAA will reserve its response to comments regarding the Brown 3 commercial sightseeing tour route until after the comment period closes for the Notice of Proposed Routes.

Comments on Sanup Flight-Free Zone

The Sierra Club-Grand Canyon Chapter supports the new Sanup Flight-Free Zone. The chapter suggests that boundaries be changed to give some protection to the Shivwits Rim and Sanup Plateau.

AOPA states that the new Sanup Flight-Free Zone would force an increase in the minimum enroute altitude for Victor Airway 235 from 10,000 to 14,500 feet MSL between Peach Springs and Mormon Mesa navigational aids; that portion of the airway would be unusable by general aviation aircraft. One commenter feels that this increase would adversely affect safety and cause burdensome requirements for oxygen equipment because of the increased altitude.

EAA wants the ceiling of the flight-free zone lowered for general aviation operations from 14,000 to 8,500 MSL. This change would accommodate general aviation flights between Las Vegas and Albuquerque.

The FAA also received several comments regarding the possible impacts of the proposed Sanup Flight-Free Zone on commercial sightseeing tour routes.

FAA Response and Final Rule Action: After analyzing the impact on VFR and IFR traffic, the FAA has adopted the Sanup Flight-Free Zone. However, the vertical limits of the Sanup Flight-Free Zone will be at 7,999 feet MSL. This will accommodate general aviation aircraft operations between Las Vegas and Albuquerque. By lowering the vertical limit of this flight-free zone, the minimum enroute altitude for V–235 remains unchanged.

In response to comments regarding routes, the FAA will consider pertinent comments received in response to Notice 96–11, as well as any additional comments submitted in response to the Notice of Proposed Routes.

Comments on Elimination of Fossil Corridor

GCATC states that the closure of the Fossil Canyon Corridor could possibly bring an end to Las Vegas-based air tours of GCNP. Although the FAA claims that only a low amount of traffic goes

through this corridor, in fact most Las Vegas-based operators conduct air tours over the Blue 1 route which traverses the Fossil Canyon Corridor and adjacent lands. If this corridor were to close, the 200-mile air tour route from Las Vegas to Tusayan would include only approximately 20 miles over less striking portions of the Grand Canyon, including only 4 miles over GCNP. Such a decrease in Grand Canyon overflight would virtually eliminate the demand for such flights.

The individual from the Navajo Area Office of the BIA says that the Hualapai Tribe utilizes the Brown 1A route to support river runner traffic across Kaibab Plateau, which will be eliminated by the closure of the Fossil Corridor, as will the Blue 1A route be eliminated due to closure of the Fossil Corridor.

The Sierra Club-Grand Canyon Chapter and Grand Canyon River Guides support closing the Fossil Canyon Corridor.

FAA Response and Final Rule Action: The FAA recognizes that closing Fossil Canyon Corridor will affect some air tour routes. However, this action is necessary to aid in the goal of substantially restoring natural quiet to the park, as mandated by Pub. L. 100–91. The FAA believes, based on its 1995 survey of air tour operators and the routes that they fly, that Fossil Canyon Corridor is not heavily used for commercial sightseeing purposes and those few operators who use it will have alternate routes available.

In response to comments regarding routes, the FAA will consider pertinent comments received in response to Notice 96–11, as well as any additional comments submitted in response to the Notice of Proposed Routes.

Section 93.307 Minimum Flight Altitudes

Proposed § 93.307 set forth different minimum altitudes in sectors and corridors for commercial sightseeing operations and transient and general aviation operations to separate these operations to the maximum extent practical. Notice 96–11 solicited comments concerning minimum altitudes for Navajo Bridge Corridor at 5,000 feet MSL for commercial tour operations and 8,000 feet MSL for general aviation and transient operations.

Comments on Minimum Flight Altitudes

The Northern California Aviation Users Working Group (NCAUWG) says that the NPS did not comply with Pub. L. 100–91 because it did not establish the "proper minimum altitude which should be maintained by aircraft when flying over units of the National Park System."

Kenai Helicopters, Inc. states that although Notice 96–11 does not change many of the minimum altitudes through the flight corridors, serious consideration for lower altitudes, coupled with noise attenuating flight procedures and maneuvers, should be analyzed in order to restore quiet in the flight-free zones in the best way.

The Sierra Club-Grand Canyon Chapter states that Notice 96–11 will not prevent flights below the canyon rim. This commenter suggests that the minimum flight altitude between Boundary Ridge and Supai be raised to 10,500 feet MSL to prevent aircraft from flying below the rim at Point Imperial, and that the FAA verify minimum flight altitudes for the entire SFRA to prevent below rim flights.

FAA Response and Final Rule Action: The FAA does not agree with these comments. The NPS Report to Congress concluded that establishing a simple minimum altitude for aircraft overflights over all units of the National Park System was neither feasible nor necessary. Instead it recommended that all reasonable methods and tools be used in issue resolution: voluntary agreements, quiet aircraft incentives, spatial zoning, altitude restrictions, operations specifications, and limits on time of operation. Pub. L. 100–91 mandated much more than an appropriate minimum overflight altitude for GCNP. Specifically, Section 3 required the FAA to prepare and issue a comprehensive airspace management plan, which in part provided for provisions prohibiting below rim flights and designation of flight-free zones. Section 3 of Pub. L. 100–91 prohibits the flight of aircraft below the rim of the Canyon. Consequently, Kenai Helicopters, Inc.'s suggestion is not appropriate. Finally, the FAA believes the clockwise flow through the Zuni and Dragon Corridors will preclude aircraft from flying below the rim at Point Imperial.

In order to simplify the northeast sector of the SFRA, the FAA has combined the Marble Canyon and the North Canyon sector into one sector and renamed this section the Marble Canyon Sector. This sector will have a minimum sector altitude of 8,000 MSL.

Section 93.316 Limitations for Commercial Sightseeing Operations

The FAA proposed several additional methods to help achieve the objective of restoring natural quiet. One such method was flight-free periods (curfews). Proposed § 93.316(a) provided for both a fixed curfew and a variable curfew.

Comments on Fixed and Variable Curfews

A number of commenters (e.g., Twin Otter, HAI, Kenai Helicopters, an individual from the Navajo Area Office of the BIA) say that curfews could create significant congestion and safety problems as air tour operators reschedule aircraft to arrive at the edge of the SFRA at the same time.

GCATA states that GCNP Airport will have a major traffic problem with all Las Vegas operators arriving at the same time for one runway of operations. Also, since all helicopter operators have moved to the Airport, they will be ready for their initial launch of the business day. GCATA asks which operator will get priority, and says that the number of flights could create havoc for the tower operators at the Airport. Another problem is that all airplanes arrive from the west and helicopters will be departing on the east side. GCATA asks how the tower operators would handle this. The commenter believes that the curfews will push airports to their maximum operation and questions if this is safe.

According to Las Vegas McCarran Airport, the majority of air tour operators operate by "banking" Grand Canyon air tour flights. In other words, based on passenger demand during a given period, each operator departs a number of aircraft more or less simultaneously from an origin airport to perform Grand Canyon air tours.

This commenter states that, under the fixed curfew, peak operations in the SFRA are anticipated to occur between 8 a.m. and 10 a.m. Under the variable curfew, total operations are anticipated to increase substantially from 9 a.m. through 1 p.m. In addition, for airports in the Las Vegas region, a total of 60 Grand Canyon air tour operations would be affected by the proposed fixed curfew, and 99 by the proposed variable curfew. These aircraft operations would be required to alter the existing times of operations to non-curfew hours, or operate on the Blue Direct route, which is not considered an air tour route and not subject to the restrictions proposed in either curfew alternative.

Several commenters are concerned about the economic impact of curfews. Heli USA states that the proposed curfews would eliminate 20 percent of its flights and cause severe economic problems.

GCATC says that the FAA's estimate of $6.6 million in annual loss of revenue, as a result of fixed curfews, is underestimated because: (1) The FAA states that all losses would be incurred in the summer season (May 1–September 30), wrongly assuming that all flights during the winter season (October 1–April 30) can be rescheduled. Although rescheduling of some winter flights may be possible, the flexibility of both air tour operators and passengers is limited and, consequently, not all passenger groups can be accommodated under FAA's proposed restricted operating hours. (2) The proposed fixed curfew forces air tour operators to begin tours substantially later and end them substantially earlier than under the dusk-to-dawn flight period currently allowed. For some months, the FAA's proposal may shorten available flight time by 25 to 33 percent, causing operators to lose multiple flights on a daily basis.

Comments from the Grand Canyon Trust state that the FAA's assessment of the costs of basic curfews is fundamentally flawed in that it makes no attempt to anticipate how mismatches between supply and demand are likely to be resolved in the marketplace. Given that Grand Canyon tours are once-in-a-lifetime experiences, and that roughly 60 percent of all visitors are foreigners for whom sightseeing tours are only one part of a more extensive vacation package, consumers are more likely to be relatively price insensitive, particularly at the margin. This implies that operators will likely be able to more than offset revenue losses resulting from the flight curfews proposed by the FAA. The commenter suggests that the near-term response of air tour operators to the regulation is likely to be a modest shift in prices upward which will allow them to recover the revenues lost due to canceled flight operations. Over the longer term, operators will be able to replace their existing aircraft with larger, higher capacity aircraft, thereby restoring the balance between supply and demand, gradually bringing down prices and restoring market equilibrium. The overall impact on the industry will likely be negligible, the commenter suggests. GCATA states that variable curfews will be unworkable because operators will not be able to handle advance reservations without knowing if a corridor will be open or shut.

Papillon states that variable flight-free periods would be unacceptable because most air tour passengers must fly in the early or late part of the day and most book their flights 3 to 6 months in advance. The variable flight-free periods would eliminate approximately 80 percent of the flight revenue of operations originating at the GCNP Airport.

An individual from the Navajo Area Office of the BIA says that curfews could create negative impacts to all three Native American tribes in the GCNP vicinity and recommends a specific exemption to Native American tribes for any flights sanctioned by such Native American tribes over their own lands. Alternatively, if tribes' commercial operations are considered as governmental flights, they should be exempted from the SFAR restrictions.

The Sierra Club-Grand Canyon Chapter states that intrusive noise is particularly annoying during the morning and evening hours and that flight-free hours should not be considered a substitute for actual restoration of natural quiet. This commenter recommends flight-free months as well as flight-free periods that would coincide with engine-free raft periods on the river.

Another commenter states that curfew times should be adjusted monthly or on a seasonal basis, and that a time of 2 or 3 hours before sunset would be a better compromise, because tourists particularly enjoy the canyon rims and along the river in the late afternoon and evening light.

Two commenters recommend fixed curfews over variable curfews. Grand Canyon River Guides states that, since the variable curfews would require further data and analysis that could not be accomplished before the end of 1996, the proposed rule should focus on fixed curfews. NPCA believes that variable curfews will take too long to implement. If some tour operators opt for quiet technology while the monitoring is being conducted, it will skew the monitoring results and reward those operators that did not upgrade their equipment. NPCA still supports noise monitoring in consideration of possible curfews for the Comprehensive Noise Management Plan. The NPCA thus recommends the seasonal fixed curfew.

Papillon states that air tours originating in the east end of the canyon normally commence one hour after sunrise and terminate approximately one hour before sunset. The commenter states that present operations basically comply with the proposed fixed curfews and that for 6 months of the year, there are no flights for more than 80 percent of the time. Thus, Papillon recommends no fixed curfews for flights originating out of GCNP airport to the east end of the canyon.

FAA Response and Final Rule Action: The FAA agrees that curfews on the west end of GCNP might create a situation whereby large numbers of aircraft attempt to enter the air tour routes at the same time and along the same routes. Based on the FAA's safety analysis of the air tour flights originating from the Las Vegas area, the FAA has decided to exempt the routes beginning on the western end of the park from any curfew. This should eliminate any impacts on Native American tribes.

However, § 93.316(a) of the final rule prescribes a fixed curfew. Specifically, no person shall conduct commercial sightseeing operations within the Dragon and Zuni Corridors during the following periods. (1) Summer season (May 1–September 30)—6 p.m. to 8 a.m. daily; and (2) Winter season (October 1–April 30)—5 p.m. to 9 a.m. daily.

The FAA has determined that the curfew will increase natural quiet during sunset and sunrise in the most heavily visited portions of GCNP, in the eastern portion of the park. The NPS identified these areas as among the most sensitive parts of the park and these times as when visitors are especially sensitive to noise impacts. Consequently, the fixed curfew makes an important contribution to substantially restoring natural quiet on a daily basis and mitigating noise impacts on the experience of the park visitors in this portion of the Canyon.

This section of the final rule also responds to the President's Memorandum of April 22, 1996, charging the Secretary of Transportation to issue regulations for GCNP that immediately reduce noise and make further substantial progress toward the restoration of natural quiet, as defined by the Secretary of the Interior.

The FAA does not agree that the imposition of a curfew will unduly impact air traffic operations at Grand Canyon National Park Airport. The FAA believes that there are sufficient air traffic control (ATC) procedures to manage those aircraft operating to and from the Grand Canyon National Park Airport, as well as those aircraft transiting the Class D airspace area. These aircraft will continue to receive ATC service on a first-come-first-served basis and, if needed, traffic management procedures will be developed and instituted.

Cap on Commercial Sightseeing Operations

Proposed Cap

Proposed § 93.316(b) set forth a temporary moratorium on increased commercial sightseeing flights. The proposal limited each operator in 1997 and 1998 to the number of monthly operations equal to the monthly operations in the base year August 1, 1995, through July 31, 1996.

Comments on the Proposed Cap

GCATA states that basing the number of monthly operations on the period August 1, 1995, through July 31, 1996 may not work since some operators may have encountered a down year; rather an average of the last three years should be used.

Papillon, Twin Otter, and Grand Canyon Airlines state that capping flights regardless of type of aircraft would not provide an incentive to convert to quiet technology, and that caps should only apply to aircraft of conventional sound signature.

The NTSB says that the proposed caps are discussed almost exclusively from the perspective of aircraft noise. The NTSB says that the FAA must also analyze the possible safety impacts of the caps.

GCATC responds to the FAA's suggestions on measures to offset revenue losses from caps, i.e., using larger aircraft; raising commercial sightseeing tour prices; rescheduling flights; and diverting some aircraft to other revenue producing uses. GCATC says that the operations cap will provide no incentive for operators to invest in larger aircraft because it will prevent operators from recouping their investment in an economically feasible time period; operators are constrained in their ability to raise prices because the demand for GCNP air tour operators is relatively elastic; rescheduling flights has no effect on increasing revenue when the number of flights an operator may fly is limited artificially by regulation; and air tour operators would already be using their aircraft for other purposes if it were economically worthwhile to do so.

A number of commenters (e.g., NPCA, Sierra Club-Grand Canyon Chapter, Wilderness Society, Grand Canyon Trust) say that basing the caps on the number of flights in 1995–96 will not restore the natural quiet and that the caps are too temporary. These commenters recommend that, since Congress identified the overflight problem in 1987, and the flight rate since then has dramatically increased, the FAA should use the 1987 operation levels to determine the caps. In addition, the maximum caps should be permanent. The Sierra Club-Grand Canyon Chapter and NPCA also recommend that the flight caps be in effect until completion and implementation of the comprehensive noise management plan.

Comments from the Grand Canyon Trust state the FAA's assumptions that any type of cap, whether it is on operators, aircraft, passengers, or air tours, will have identical effect is erroneous. Air tour operators can be expected to adjust their pricing structures, aircraft fleets, and tour offerings to maximize net operating revenues under whichever system of caps is adopted. Consequently, the commenter suggests that the actual economic cost of caps to the industry is likely to be small.

Grand Canyon River Guides says that since tour operators were mandated to report and pay for their use of airspace during the base year, those figures should be used by the NPS and the FAA to determine the allocation levels; operators who may have been avoiding user fees by underreporting their operations should not receive any special consideration. This commenter recommends that, once operational limitations are in place, the FAA should require that any new aircraft be quieter than those being replaced, and that, as this shift occurs, the number of aircraft should not be allowed to increase.

Kenai Helicopters proposes that any cap on air tour operators should grandfather the current operators, of whom many have made sizable investments in aircraft and facilities to meet the market demand. Many of these facilities are located on lands with long term (20–25 years) leases that necessitate long term operation potential to stay in business.

Heli USA states that since a large majority of the air carriers operating tours in GCNP are either new or have not reached the capacity of business to pay for their investment, caps based on historical records would be unfair.

Twin Otter and Grand Canyon Airlines state that setting operations caps raises serious administrative problems. For example, Twin Otter says that the "use or lose" rules which apply to air carrier slots would not work at the Grand Canyon since air tour schedules are seasonal and subject to revisions and cancellations for weather. This commenter says that the only fair alternative would be a slot market mechanism like that used to allocate restricted capacity at the High Density Rule airports.

FAA Response and Final Rule Action: In the final rule § 93.316(b) establishes a cap on commercial sightseeing aircraft that can operate in the SFRA. Specifically, this section states that no person may operate more commercial sightseeing aircraft in the Special Flight Rules Area than the highest number of aircraft that appeared on the certificate holder's operations specifications, and that were used for commercial sightseeing operations in the Grand Canyon Special Flight Rules Area, between July 31, 1996 and December 31, 1996.

NPS modeling suggested that between 1988 and 1994, that part of the park experiencing a substantial restoration of natural quiet declined from 43 to 31 percent. The modeling further suggested that by

2010 this area would decline to about only 10 percent of the park. Because the FAA and NPS concur that the best way to address the current erosion of natural quiet and achieve the substantial restoration of natural quiet is through reducing noise at the source (i.e. quieter aircraft), a cap is an interim measure needed to prevent a worsening of the situation prior to implementation of the noise limitations proposed in the NPRM published simultaneously with this final rule. The combination of the final rule and the noise limitations in the NPRM will make possible the substantial restoration of natural quiet mandated by Pub. L. 100–91.

This section of the final rule also responds to the President's Memorandum of April 22, 1996, charging the Secretary of Transportation to issue regulations for GCNP that place appropriate limits on sightseeing aircraft over GCNP to reduce the noise immediately and make further substantial progress toward restoration of natural quiet, as defined by the Secretary of Interior.

Section 93.317 Commercial Sightseeing Flight Reporting Requirements

Proposed § 93.317 established commercial sightseeing flight reporting requirements. As proposed, during the 5-year period following May 1, 1997, each certificate holder would submit, in a form and manner acceptable to the Administrator, three operational reports yearly to the Las Vegas FSDO. Each report would cover a 4-month period ending April 30, August 31, or December 31, and would be required to be submitted no later than 30 days after the reporting period closes. Certificate holders would be required to provide the aircraft identification number (registration number), departure airport, departure date and time, and route(s) for each operation flown in the SFRA.

Comments on Commercial Sightseeing Flight Reporting Requirements

Two operators state that the reporting requirements would be oppressive and burdensome, and the costs associated with this requirement would be passed on to air tour customers. One of these commenters recommends that if a report is necessary, it should only require date, departure point, and total number of operations by route.

Grand Canyon River Guides says that, compared with the paperwork already necessary to keep pilots and aircraft current, the additional burden of recordkeeping in Notice 96–11 is minor, particularly since operators probably already are keeping track of such things.

FAA Response and Final Rule Action: Commercial tour operators were required by SFAR 50–1 to obtain a Part 135 air carrier operating certificate. The existing reporting requirements under Part 135 for operators using multiengine aircraft would capture the information required by this rule. The FAA believes that any recordkeeping burden imposed by this rule will be minor and related to copying the information into an FAA format. The required information is needed to provide accurate information on GCNP overflights for noise and safety management purposes, to help validate noise models, to determine where noise mitigation is needed, and to provide the basis for more flexible noise management system. The recordkeeping requirements in the final rule therefore are as proposed.

Environmental Review

The FAA conducted an abbreviated scoping process and prepared a Draft Environmental Assessment (EA) for the proposed rule to assure conformance with the National Environmental Policy Act of 1969 and all applicable environmental laws. Copies of the Draft EA were circulated to interested parties and placed in the Docket, where it was available for review. The Notice of Availability of the Draft EA was issued on August 21, 1996. The original 45-day comment period, which was scheduled to close on October 4, was extended until November 18, 1996. Based upon the Draft EA and careful review of the public comments, the FAA has determined that a finding of no significant impact (FONSI) is warranted. The final EA and the FONSI were issued on December 24, 1996. Copies have been placed in the public docket for this rulemaking, have been circulated to interested parties, and may be inspected at the same time and location as the final rule.

This final rule constitutes final agency action under 49 U.S.C. 46110. Any party to this proceeding, having a substantial interest may appeal the order to the courts of appeals of the United States or the United States Court of Appeals for the District of Columbia upon petition, filed within 60 days after entry of this Order.

Regulatory Evaluation Summary

Any changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third,

the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. A regulatory evaluation of the proposal is in the docket.

In conducting these analyses, the FAA has determined that this Final Rule will be ''a significant regulatory action'' as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures. However, this rule will not have a significant impact on a substantial number of small entities.

The final rulemaking will not have a significant impact on international trade. There may be some increase in the U.S. balance-of-payments account as a result of a decrease in foreign expenditures on GCNP tours.

Introduction

To assist the NPS effort to measure aircraft noise levels in GCNP, the Las Vegas Flight Standards District Office (FSDO) conducted a field survey of all operators certificated to provide commercial sightseeing air tours within the GCNP SFRA. The Las Vegas FSDO SFAR No. 50–2 Air Tour Route Usage Report (field survey) detailed information for each operator with regard to the number of operations conducted along each commercial sightseeing air tour route within the GCNP SFRA. This information was further broken down for each type of commercial air tour sightseeing aircraft in the operator's fleet that operated along these routes during the most recent 3 years through early October, 1995. With the exception of the ''Blue Direct South'' and certain ''Brown'' routes for fixed wing aircraft and the ''Green 3'' and ''Green 3A'' routes for helicopters, all routes identified in the Grand Canyon VFR Aeronautical Chart were identified by GCNP commercial air tour sightseeing operators as routes flown.

To determine the different kinds of commercial sightseeing air tours as well as to estimate the total number of commercial sightseeing air tours, commercial air tour sightseeing passengers, and commercial air tour sightseeing revenue for GCNP, the FAA, utilizing known passenger seating capacities of each type of aircraft used by GCNP commercial air tour sightseeing operators, cross referenced the Las Vegas FSDO field survey detail with tour and cost information as provided in Grand Canyon commercial air tour sightseeing brochures. The estimates derived from this cross referencing form the basis from which the FAA developed the cost estimates for this final rulemaking.

Response to Comments on the Original Regulatory Evaluation

The FAA held public meetings in September 1996 at Scottsdale, AZ and Las Vegas, NV where additional comments were offered and later submitted to the docket. These comments have also been included in the following discussion.

In addition to the individual comments, the FAA received approximately 60 comments from industry and tourism associations (e.g., the Grand Canyon Air Tour Council, Grand Canyon Air Tourism Association, National Air Transportation Association, and the United States Air Tour Association); environmental groups (e.g., Grand Canyon Trust and the Sierra Club); major GCNP air tour operators; certain Federal Agencies (National Park Service, Small Business Administration); and Indian Tribes (Hualapai and Havasupai). Some of the more substantive comments also include commissioned studies in support of their position. Many of the comments with more substantive economic and analytical content however, were also offered by the associations and operators as testimony at the public hearings, and are summarizes below. A full summary of all the comments can be found in the Preamble.

Typically, the comments from GCNP air tour operators and associated trade associations emphasized the negative economic impact the FAA NPRM would have on the overall GCNP air tour industry. Of particular note, several commenters took exception to the FAA assumption that GCNP air tour operators' capital and labor resources were relatively mobile, i.e., the GCNP air tour operator could readily relocate his business to another area of the United States. This concept unfortunately, was poorly worded and misconstrued. The FAA has some information that some commercial air tour sightseeing operators, SFAR 50–2 Tour Route Usage Report, reported such a small volume of commercial air tour sightseeing operations in GCNP as to indicate that the conducting of commercial sightseeing air tours in GCNP was only a part of their overall business. The implication was intended to convey mobility between the operators' GCNP commercial sightseeing air tours and their operations in other non-GCNP commercial air tour sightseeing ventures, presumably while remaining within the GCNP environs. It was not intended to suggest that GCNP operators in general, or in total, could simply start up their commercial air tour sightseeing ventures elsewhere in the United States. The FAA has refined this assumption in the final regulatory evaluation.

Comments were received with regard to certain general economic issues such as (1) locality or market differentiation (e.g., the Las Vegas/Southern Nevada economy as compared with the Tusayan/ Northern Arizona economy); (2) the ''trickle-down'' or multiplier effect; and (3) the internationalism

of GCNP tourism. Several commenters note that the NPRM neglected to take into consideration that the majority of the growth associated with GCNP commercial sightseeing air tours derives from the significant growth of Las Vegas, and that the West and East ends of GCNP are analytically distinguishable. The FAA notes that the growth rate utilized in the NPRM regulatory evaluation was derived from a composite of the tower operations of four Las Vegas vicinity airports and those of Tusayan as reported in the 1994 Tower Activity Forecast (TAF). The compound annual rate of growth of 3.3 percent, therefore, accounts for the different rates of growth at the West and East ends of GCNP. The FAA believes this growth rate is representative of the growth rate of GCNP. Nevertheless, the FAA has incorporated the concept of different rates of growth between the West-end and the East-end in the final rule.

With regard to the concept of the "trickle-down" or multiplier effects of this rule, the Western States Coalition states that the air tour industry is very important to the rural economies of the states surrounding the Grand Canyon and asks the FAA not to further restrict flights in the canyon. Cruise America, Inc., notes that the negative economic impact will trickle down from a reduction in passengers visiting the canyon to a reduction in income for local populations surviving off tourism revenue. Additionally, bus tour companies and European travel wholesalers would be forced to reroute their organized tours, resulting in a detrimental effect of inbound tourism to America, and the efforts of private air carriers who promote North America via operations in the Canyon would also be hurt.

The Grand Canyon Air Tourism Association (GCATA) states that Northern Arizona and its small towns along Rt. 40 are very dependent on the tourist trade, and that any regulation that will have an adverse economic impact or cost an American his or her job must be taken only when there is overwhelming and compelling evidence to support the action. (Air Star Helicopters states that the NPRM would create a loss of pilot and administrative jobs; decrease aircraft, parts and fuel sales; and cause an unnecessary loss of tax revenue). GCATA further notes that the air tour industry is a viable business, both in Las Vegas and Arizona, and contributes an annual input of approximately $250 million. The commenter concludes with the example of Eagle Airlines, a GCNP commercial air tour sightseeing operator located in Las Vegas which currently is building a $40 million dollar complex which will include a Grand Canyon terminal and hanger/office facilities for several operators.

The Grand Canyon Air Tour Council (GCATC) cites the same $250 million revenue base, noting that 1,400 direct jobs are involved, and criticizes the FAA economic impact numbers as seriously understated. GCATC references a study being conducted by the University of Nevada at Las Vegas (UNLV), Center for Business and Economic Research, as support for this position. The draft UNLV study in its submission entitled "The Economic Impact of the Nevada Air Tour Industry: Work-to-Date" estimates an economic impact of the air tour operators to the Grand Canyon on the Clark County (Las Vegas) economy as in excess of $500 million, assuming a loss of 436,925 visitors expected to travel from Las Vegas by air to visit the Grand Canyon in 1996. Clark County air tour operators alone could be expected to lose revenue in the range of $81 million to $117 million, and non-aviation losses were estimated to be in excess of $400 million. Extensive detail of the individual components making up the indirect economic impact, inclusive of individually calculated multipliers for each impact, was also submitted.

In the full regulatory evaluation accompanying the NPRM, the FAA states that its cost estimates and economic analysis are limited to the direct economic impacts on commercial sightseeing air tour operators and customers. The FAA also clearly identifies the generally accepted multiplier of 2.5 in its discussions of costs. The FAA appreciates the detailed information provided by UNLV in its preliminary findings. However, the UNLV results are predicated on the following two somewhat dire assumptions: (1) All Las Vegas GCNP commercial air tour sightseeing operations will cease as a result of this rulemaking; and (2) all Las Vegas tourists who planned to take an air tour of the Canyon as part of their visit to Las Vegas will no longer come to Las Vegas. Furthermore, by incorporating unadjusted input-output coefficients as the individual multiplier factors used to assess the economic impact of this rulemaking, a chain of double counting was introduced that resulted in a total impact far in excess of even the most severe predictions offered in other comments.

Comments were received regarding the importance of foreign commercial air tour sightseeing passengers and foreign tour dollars. The United States Air Tour Association (USA) included statistics indicating that foreign air tour passengers constitute 60 percent of all air tour passenger in the United States. Other commenters estimate a higher percentage of foreign air tour passengers to GCNP, and Heli USA notes that the Grand Canyon is the major reason most international visitors come to Las Vegas. The foreign tourist as a group averages a two-night stay in Las Vegas spending millions of dollars yearly in hotels, restaurants, casinos, and shops.

A representative of Cruise America, Inc., specializing in the rental and sale of recreational vehicles, draws a clear distinction between the Japanese and other Asian tourists who typically travel in large tour groups and German and other European tourists who tend to travel as small family groups and

are referred to as "RV Travelers". The former group make up the majority of foreign tourists flying commercial sightseeing air tours out of Las Vegas most of which connect with bus tours of the South Rim; the latter group tend to drive to the Canyon and take the commercial sightseeing air tours originating out of Tusayan. With both groups, the majority typically advance book (or reserve) their activities 3–6 months in advance, and the commenter notes that the inability to pre-reserve the Grand Canyon portion of their trip could potentially remove Arizona and/or Nevada from their planned tour. The FAA appreciates the additional information regarding international tourism to GCNP.

To a lesser extent, commenters also addressed the importance of providing the opportunity to view the Canyon to the physically challenged and otherwise physically unfit to hike, raft or even access the viewer areas of the South Rim. The generally held estimate of the proportion of physically challenged commercial air tour sightseeing passengers is 20 percent or more (Eagle Canyon Airlines). Papillon, however, suggests that while the real estimate of physically challenged commercial air tour sightseeing passengers is closer to 3 percent, a more notable statistic is that fully 80 percent of commercial air tour sightseeing passengers are physically unfit to see the Canyon in any other manner, including the visitor viewing areas of the South Rim. The FAA noted the physically challenged passengers constitute a significant portion of GCNP commercial air tour sightseeing passengers in its NPRM assessment.

Comments addressing the economic impact of the rulemaking on the Native American tribes of the GCNP area were also received by the FAA. Heli USA notes that the combined helicopter industry of Las Vegas yearly pays around $360,000 to the Hualapai Tribe for landing rights in conjunction with the popular commercial sightseeing air tours out of Las Vegas using the Green 4 tour route which also includes the Hualapai River Runners white water rafting program. The commenter also notes that new programs are being introduced with the River Runners and Heli programs with Grand Canyon West which could gross revenues in excess of $1 million in the forthcoming year. Comments of the Havasupai Tribe also address the economic impact of lost revenue if the tours conducted along the Green 3 helicopter tour route (Papillon) are impacted by the rulemaking. The Havasupai also note that the current change in the Blue 1 commercial sightseeing air tour route resulting from the merging of the Toroweap/Shinumo Flight-Free Zone could have serious adverse affects on Havasupai lands as a prominent tourist attraction. Other issues concerning the impact of this rulemaking on Native American Tribes and their properties are addressed elsewhere in the final rule.

The FAA also received comments regarding the business operations of the commercial air tour sightseeing industry. Alan R. Stephen, President of Twin Otter International (TOIL) on behalf of Grand Canyon Airlines (GCA) states that the FAA's economic analysis demonstrates little understanding of business decision-making. The commenter notes that profits rather than revenues normally drive business investment decisions, and that the relationship between retained earnings (profits) and changes in revenue is best described by the 80–20 principle—a 20 percent reduction in revenue results in an 80 percent reduction in profits. The commenter adds that these profits are highly leveraged by load factor, e.g., operating costs are the same regardless of the number of commercial air tour sightseeing passengers on a tour and the revenue per passenger (ticket price) over break-even constitutes the bottom line profit. (The commenter does not indicate what the minimum break-even number of passengers per commercial sightseeing air tour is). Finally, the commenter notes the high capital intensity of airlines such as Grand Canyon Airlines (GCA), and GCA investment in facilities and equipment is the same regardless of the percentage of its air tour potential is actually flown. GCA also notes increased utilization as the single most important incentive for operators to invest in quiet aircraft technologies.

Further comments on commercial air tour sightseeing profitability were offered by Papillon Grand Canyon Helicopters which notes that the industry is economically fragile and capital intensive, and must stay fully staffed even during the slow season. The result is a significant loss to be overcome at the beginning of each tourist season. The commenter estimates there are 30 to 45 days of potential profit for the year's work and to operate successfully in the aviation business requires optimum utilization of aircraft.

Another determining factor of profitability cited in the comments is the number of commercial sightseeing air tours that can be conducted in a given day. Comments were submitted in reference to the serious potential economic consequences of placing curfews on commercial sightseeing air tours. Heli USA, which offers Las Vegas originating helicopter tours along the Green 4 tour route, states that at least four round trips (turns) must be flown per day per helicopter to enable a company to be financially stable, let alone profitable.

Sundance helicopters, which also offers Las Vegas originating helicopter tours along the Green 4 tour route, confirms four trips as the break-even level of daily operations per helicopter and cites the obvious consequence of the NPRM curfew eliminating the day's final (5 p.m.) commercial sightseeing air tour. Air Vegas Airlines, which flies Beech C–99 (15-seat) fixed-wing aircraft commercial sightseeing

air tours along the Blue 1 commercial sightseeing air tour route, indicates that approximately 25 percent of the Air Vegas total revenue is generated by its 7:30 a.m. departure from Las Vegas; elimination of this tour would result in annual revenue losses of approximately $4 million. Air Vegas Airlines also notes that it has invested in excess of $10 million in its fleet of Beech C–99 aircraft and a minimum average of three revenue trips per day is necessary to amortize the acquisition costs.

The FAA appreciates all comments regarding the derivation of business profits for GCNP commercial sightseeing air tour operators. Without accessibility to individual operators' books, the FAA relied on operating revenue, and, to a lesser extent, net operating revenues, and the concomitant changes therein, as proxies for changes in the profitability of commercial air tour sightseeing operations.

Travel time, or its alteration from current practices, was also cited by commenters as a contributing cost of this rulemaking. McCarran International Airport (Las Vegas), through a commissioned study, developed an airspace simulation analysis to estimate the potential effects of the NPRM on aircraft delays, travel times, and operating costs. According to the study, the major contributing factor to increased aircraft delays is contained in the NPRM curfews which will result in higher demand during already congested peak hours at Grand Canyon Airport. The variable curfew would have a much more significant effect on aircraft delays (as much as 4 to 6 minutes per aircraft operation) than the fixed curfew (up to 2 minutes per operation). Some of these delays could be reduced to about one minute per operation (or less) by changing air tour operating strategies to fly non-curfew affected routes during curfew periods. It is not known if flying non-curfew routes would be a viable option for an operator. Air Vegas Airlines comments that the average time to fly the Blue 1 route from Las Vegas to Tusayan takes about 55 minutes; the return on the Blue Direct passenger route requires about 45 minutes.

The rerouting of aircraft onto modified air tour routes results in increases in aircraft travel time of approximately 1 to 2 minutes per aircraft operation depending on the air tour routing alternatives implemented. The operating cost penalty includes the costs of both increased travel times and increased aircraft delays. GCATC adds that, even if some operators could adapt to the new restriction, neither the FAA nor the GCATC has any reason to believe that passengers would be willing to pay more to fly over tightly restricted (and therefore, less desirable) routes. TOIL/GCA note that restricting the Zuni Corridor to one-way traffic would eliminate GCA's important east Canyon air tour (Black 1) which is flown when poor weather conditions otherwise preclude operating GCA's primary "Grand Discovery" air tour, which flies up the Zuni, over the north rim, and back down the Dragon Corridor. (This was also alluded to at the Las Vegas portion of the public meetings by Papillon Grand Canyon Helicopters which notes that the restrictions placed on the Zuni Corridor with a fly-out to the NE over the Painted Desert, provides about 9 minutes of Canyon viewing for a 50-minute Grand Canyon air tour). Finally, TOIL/GCA indicates that with the extension of the Bright Angel Flight-Free Zone to the GCNP boundary, the distance of the Grand Discovery air tour is lengthened by about 20 percent and, therefore, would increase GCA's operating costs by a corresponding 20 percent.

The FAA appreciates the comments relating to curfews and their impact on travel times and alternate tour options. The FAA has taken these comments into consideration from a safety aspect, and refined certain of its originally proposed changes to flight corridors and flight-free zones.

Another major issue raised in the comments received by the FAA concerns the adoption of quiet technology as an alternative means to restore natural quiet. While this issue is addressed elsewhere in the final rule, certain costs associated with this option are noted. In general, according to TOIL/GCA comments, "quiet" aircraft models tend to be larger in passenger seating capacity than the conventional aircraft they replace and also more expensive. With regard to fixed-wing aircraft, TOIL/GCA identified the Cessna-208 Caravan (9 passenger seats) and the deHaviland DHC–6–300 Vistaliner (19 passenger seats) as the primary quiet replacements for the current, predominately flown Cessna C–207 (6 passenger seats) and C–402/Piper Navajo (9 passenger seats). However, the cost of a new Caravan is approximately $1.3 million and about $1.4 million to purchase a DHC–6–300 Twin Otter, convert and refurbish to the Vistaliner configuration. Alternatively, TOIL/GCA suggests that twelve Cessna C–207's or nine C–402/Piper Navajos could be purchased for the price of one Caravan or one Vistaliner. Scenic Airlines, Inc., offers corresponding prices for the Cessna C–208 Caravan and C–402/Piper Navajo of $1.25 million and $200,000, respectively. Air Vegas Airlines, which operates a fleet of Beech C–99 turbo-props (15 passenger seats), notes that the Beech C–99 is a faster aircraft than most currently operating in the Canyon and that its power settings could be set to reduce noise.

With regard to helicopters, Papillon Grand Canyon Helicopters notes that only the McDonnell Douglas MD500 (MD 520–N, or NOTAR) is certified and qualifies as a "quiet" aircraft. However, Heli USA comments that the NOTAR cannot even perform; tests at the Canyon showed it could only carry 3 passengers on a hot day (the MD 520–N is designed for 4 passengers). This was confirmed by Air Star Helicopters, Inc. which had attempted to operate the MD 520–N as part of its commercial air

tour sightseeing fleet. Papillon Grand Canyon Helicopters and McDonnell Douglas both note that McDonnell Douglas has developed the MD600 (6/7 passenger seats) which meets the criteria for quiet aircraft and will be available for delivery in early 1997. (Papillon has one on order and Air Star Helicopters has two on order, all of which are scheduled for delivery in 1997.) The MD600 costs between $1.25 million and $1.5 million depending on cost items over base. Finally, Papillon Grand Canyon Helicopters also notes in its comments that they are developing a 9-passenger seat helicopter (Whisper Jet S55–QT) which is equally as quiet as the MD600 and costs approximately the same making it about 50 percent more cost efficient than the MD600 because of its expanded seating capacity. Delivery of these aircraft are expected within the forthcoming year.

The FAA appreciates the expanded information on "quiet technology" aircraft provided by the commenters, all of whom have taken an advocacy position for these type of aircraft with respect to GCNP commercial sightseeing air tours. The FAA notes, however, that all commenters in support of "quiet technology" aircraft either currently maintain fleets, made up of "quieter aircraft" or are in the process of taking delivery on new quiet aircraft within the year. Quiet technology is addressed elsewhere in this final rule and is the subject of a concurrent Notice of Proposed Rulemaking effort underway.

The above summary of comments reflect the economic issues arising more often from the commenters; the FAA also received occasional comment addressing other economic concerns, as well. Comments by the Office of Advocacy of the Small Business Administration (SBA) on the Regulatory Flexibility Analysis (RFA) challenge the initial RFA findings on the impact on small tour operators because revenue losses were assessed at the aggregate level. The SBA also suggests that a different compliance and reporting requirement or timetables for small entities should be explored, possibly even an exemption from these parts of the rule. Air Vegas Airlines also notes the added cost associated with the training (retraining) of pilots which will be required as a result of the elimination or restructuring of present routes; the commenter uses an example to illustrate his point which suggests that training costs will be burdensome.

The FAA has carefully reviewed the SBA comment and, based on the data available, has analyzed the regulatory flexibility impact using reasonable assumptions—including analyzing revenue losses at the aggregate level. Different compliance and reporting requirements for the smaller entities were also considered.

The SBA had suggested that it would be appropriate to use elasticity of demand information to calculate the extent to which small businesses will recoup costs by increasing fares. The data for this segment of the population, however, are not available. In another example, the SBA had suggested that the FAA evaluate data on profits which "may be available from Dun and Bradstreet." Data on profits from very small entities that would be affected by this proposal are also not available from the recommended source or within the public docket. The SBA also believes that the FAA has not fully addressed significant options for consideration. Given both the qualitative and quantitative costs and benefits, the FAA believes that the best option that minimizes costs and maximizes benefits was chosen. With regard to other concerns made by the SBA and Air Vegas Airlines, the FAA has taken these comments into consideration in producing the final RFA and in estimating costs associated with this rulemaking. (See the accompanying Regulatory Flexibility Analysis for a more complete discussion regarding the alternatives considered to reduce the cost impact of this rulemaking on small entities.)

Costs

The total cost impact of this rulemaking will depend to a large extent on the response to the changes on the part of commercial air tour sightseeing operators. Under a worst case scenario, GCNP commercial air tour sightseeing operators directly impacted by the reconfiguration of the GCNP SFRA could cease commercial air tour sightseeing operations altogether in the Canyon; this essentially would mean the complete elimination of the GCNP commercial air tour sightseeing industry. However, it is expected that the affected commercial air tour sightseeing operators will adapt to the modified routes resulting from the new GCNP SFRA changes by redesigning or offering new commercial sightseeing air tours. The estimated cost impact of the adjustments suggests a continued viable commercial air tour sightseeing industry.

With regard to the consumers of commercial sightseeing air tours, the altered commercial air tour sightseeing routes resulting from the new changes to the GCNP SFRA, will, in some instances, shorten the length of a commercial sightseeing air tour currently offered. In other instances, it will prolong the time a commercial air tour sightseeing passenger spends on a commercial sightseeing air tour, but it will not necessarily prolong the time available to the passenger to view the more prominent features of the Grand Canyon. In still other instances, it will eliminate the most prominent feature of the commercial sightseeing tour. Certain redesigned commercial sightseeing air tours are likely to increase in price to cover the commercial air tour sightseeing operator's added operating costs.

To the extent a commercial sightseeing air tour of GCNP is perceived to be a devaluation in the current service offered, or its value is perceived to be less than its price, commercial air tour sightseeing could be impacted adversely. However, consumption of goods and services such as commercial sightseeing air tours are typically one-time only events and not repeated by the same consumer. Therefore, the tourist is more likely to be concerned with the current commercial air tour sightseeing offering, and not its perceived loss of value in comparison to previous years.

The preceding paragraph relates to the concept of consumer surplus and the perceived loss thereof. Inherently, there will be a loss of consumer surplus when currently existing GCNP commercial sightseeing air tours are degraded as in the case of eliminating the National Canyon portion of what the FAA refers to as the "Blue 1, Blue Direct" tour. Similarly, with the Zuni Point Corridor becoming one-way, consumers taking an abridged commercial sightseeing air tour which substitutes the Painted Desert to the east of the Canyon for the lost viewing minutes of the Canyon itself, will likely also experience some loss of satisfaction. The FAA, however, is unable to quantitatively estimate these losses in consumer surplus because no consumer surplus valuation of commercial sightseeing air tours is available, and the comparison of the consumer surplus derived from slightly different goods among different individuals (e.g., interpersonal comparisons) can be very misleading. Thus, the FAA is only able to discuss the consumer losses associated with this rulemaking in general terms.

In this analysis, the FAA has assumed that commercial air tour sightseeing operators could recover any increase in operating cost due to this rulemaking by charging their customer more for air tours of GCNP. In fact, it may not always be possible for these operators to recover all the cost increases imposed on them by this rulemaking by raising prices of air tours. Customers are sensitive, in varying degrees, to price increases and react by buying less of those goods and services when their prices are increased. Customers tend to be insensitive to very small increases in prices on goods and services that are infrequently purchased (a one cent increase on the price of a new car is not likely to have any impact on any potential customer's purchasing behavior). Buyers do tend to be very sensitive to large increases on goods and services that are frequently purchased (a one dollar increase in the price of a gallon of milk will result in people buying less milk). At this time, the FAA does not have adequate data to estimate how sensitive customers are to noticeable price increases for air tours of the Grand Canyon. However, the FAA believes that commercial air tour sightseeing operators will be able to recover most of the increased costs imposed by this rule, because the price increases will usually be relatively small (compared to the price of a air tour) so that most potential customers will continue to purchase air tours of the Grand Canyon.

The following discusses the potential cost impact of each change:

(1) Modification of the Special Flight Rules Area (SFRA)

The extension of the GCNP SFRA, which effectively increases the lateral dimensions of the existing SFRA by approximately 2.8 percent, will result in only those costs associated with revising and publishing a new Grand Canyon VFR Aeronautical Chart. Similarly, the increase in altitude of the SFRA ceiling from 14,499 to 17,999 feet MSL, which is intended to protect GCNP from the impact of commercial air tour sightseeing aircraft overflying the flight-free zones, will have minimal impact on GCNP commercial air tour sightseeing operators. Its cost will be included under the revision and publishing costs noted above. The FAA considers chart revision to be a part of normal, on-going administrative costs, not costs incurred as a result of this rulemaking action. Neither the chart revision nor the cost associated with a change in altitude over the flight-free zone will have a measurable impact on GCNP commercial air tour sightseeing operators.

(2&3) Modification of existing and establishment of new flight-free zones and flight corridors

The reconfiguration of GCNP flight-free zones and flight corridors will impact all commercial air tour sightseeing routes, and consequently, all revenue ($113.1 million) received by the GCNP commercial air tour sightseeing industry. Approximately $92.5 million, or about 82 percent, of the total revenue generated by the GCNP commercial air tour sightseeing industry is derived from the commercial sightseeing air tours offered on the "Blue 1" tour route. The FAA estimates that the cost impact associated with the elimination of the National Canyon portion of this tour route will be about $2.4 million average annual reduction in net operating revenue (1997–2008) with a likely greater loss of consumer surplus. There will also be some further reduction in net operating revenue associated with the remaining $20.6 million in total commercial air tour sightseeing revenue; most of this will result from the change to one-way traffic in the Zuni Corridor.

A more detailed breakdown of the commercial sightseeing air tour routes effected by this change and an assessment of the potential losses are as follows:

Toroweap/Shinumo Flight-Free Zone

(a) The merging of the Toroweap-Thunder River and Shinumo Flight-Free Zones and the resulting closing of the Fossil Canyon Corridor will eliminate tour routes "Blue 1A", "Brown 1A", and "Green 3A". In response to the Las Vegas FSDO SFAR 50–2 Tour Route Usage Report, no operators indicated use of the "Green 3A" route, only one operator reported use of the "Brown 1A" route and four operators reported use of the "Blue 1A" route. The merging of the two flight-free zones and resulting elimination of the Fossil Canyon Corridor will only impact the tour offerings of these five operators, only one of which, however, utilizes a single aircraft and offers only the one type of tour in GCNP.

All of these commercial sightseeing air tour packages are part of a larger group designated as "miscellaneous" tours; collectively, they generated total commercial air tour sightseeing revenues of approximately $724,000 in 1995 by providing approximately 1200 tours that carried 6,500 passengers. However, only the one single tour/single aircraft operator with 1995 annual revenue of approximately $9,000 (the forecast annual average for the 12 year period 1997–2008, is $11,500) will be required to develop and competitively offer a completely new tour. The other four operators can readily modify their current tour packages with minimal cost outlay because they already offer established commercial sightseeing air tours along other similar routes.

The single tour/single aircraft operation likely provides transportation to river rafting tours, a "tour" endeavor which can be modified. The only alternative for this operator is elimination as a GCNP commercial air tour sightseeing operator concomitant with the loss of an average annual revenue stream of $11,500 over the 1997–2008 time frame. However, the FAA believes that if this particular operator was unable to adapt, his tour business will not be lost, but rather it will be taken over by another similar operator. Thus, the FAA estimates the cost of this change will be zero revenue loss, but possibly, will lead to the elimination of a single commercial air tour sightseeing operator doing a relatively small amount of business in GCNP.

(b) The southward extension of the Toroweap-Thunder River Flight-Free Zone and concomitant elimination of commercial air tour sightseeing access to the National Canyon portion of what is referred to as the "Blue 1, Blue Direct" commercial sightseeing air tour will result in an estimated average annual reduction of net operating revenue in excess of $2.4 million from 1997 through 2008. The source of this revenue loss is the anticipated reduction in ticket prices. Reduced ticket prices can be expected because commercial air tour sightseeing operators will no longer be offering an aerial tour of the Grand Canyon. Instead they will merely offer a commuter flight to Tusayan as a result of being precluded from offering the National Canyon aerial portion of their former commercial sightseeing air tour.

The estimated average annual reduction in net operating revenue of $2.4 million was derived by subtracting the estimated reduction of $2.5 million in average annual variable operating costs from a total average annual revenue loss of $4.9 million.

Bright Angel Flight-Free Zone

(a) In 1995, according to the SFAR No. 50–2 Air Tour Route Usage Report, 13 operators (fixed-wing aircraft and helicopter) with total revenues of approximately $9.3 million conducted commercial sightseeing air tours along the "Black 1, 1A" and the "Green 1, 1A, 2" tour routes and another five operators with total revenue of approximately $1.4 million conducted helicopter commercial sightseeing air tours in the Dragon Corridor. The total 1995 revenue potentially impacted by this part of the rule is estimated to be about $10.7. The FAA estimates, however, that the average annual increase in variable operating costs resulting from an approximate 20 percent increase in duration of the commercial sightseeing air tours operating on the "Green 1, 1A & 2" will be offset by increased ticket prices. Thus, the FAA estimates no net operating losses associated with the north extension of the Bright Angel Flight-Free Zone.

(b) The reconfiguration of the Zuni Point Corridor and the limiting of it to one-way traffic will impact all commercial sightseeing air tours that depend on the current two-way VFR routes to offer a simple fly around type tour of the Zuni Point Corridor. This includes one fixed-wing aircraft and four helicopter GCNP commercial air tour sightseeing operators. The fixed-wing aircraft operator generated commercial air tour sightseeing revenue of approximately $13,000 from this particular tour in 1995, a tour part of the larger group of "miscellaneous" tours. The substitutes for this operator will be the "Black 1, 1A" tour route or flying out to the east over the Painted Desert as a tour route option. Both of these tour route options are expected to increase the tour price by about $10 per passenger, or about $2,600 total annual added cost to the commercial air tour sightseeing consumers based on 260 passengers opting for this tour in 1995.

The four helicopter operators generated 1995 commercial air tour sightseeing revenue of just under $1.5 million flying the "Green 1" commercial air tour sightseeing route in conducting over 3,700 commercial sightseeing air tours with more than 12,800 passengers. Similar options are also available to GCNP commercial air tour sightseeing helicopter operators, i.e., the "Green 1, 1A & 2" ("Zuni Point NW") tour route or the Painted Desert tour route option. Each of these will increase the tour price per passenger by about $45 or $574,400 total annual added cost to the commercial air tour sightseeing consumers based on the 12,800 passengers opting for this tour in 1995.

The total potential increase in 1995 annual costs of this particular alteration in the GCNP SFRA will be about $577,000 ($2,600 plus $574,400) in added consumer costs (increased commercial air tour sightseeing prices) because of the elimination of less costly commercial air tour sightseeing options. The forecast annual average cost for the 12 year period 1997–2008, is just over $740,700 per year. However, adaptation on the part of commercial air tour sightseeing operators to the changes in the Zuni Point Corridor could result in the possible addition of one commercial air tour sightseeing flight per hour through the Dragon Corridor. This will be the outcome if the five affected operators choose the "Zuni Point NW" option as their commercial air tour sightseeing substitute.

There is another cost associated with the one-way limitation of the Zuni Point Corridor in conjunction with the north expansion of the Bright Angel Flight-Free Zone. The ticket price increases resulting in added consumer costs detailed above do not fully cover the increase in variable operating costs of the commercial air tour sightseeing operators adopting the new Zuni-Alpha-Dragon Corridors loop. The five new operators of this kind of tour are limited to raising their tour prices to only what is currently being charged the tour consumer by the already established commercial air tour sightseeing operators of this kind of tour. This is captured in the price increases of $10 and $45 for fixed-wing aircraft and helicopter tours, respectively. The difference between what these operators could receive in additional revenue through price increases and the added costs imposed by this rule will result in about $383,000 that the operators must absorb as losses in increased aircraft operating costs. Thus, the full cost of making the Zuni Point Corridor one-way with the north expansion of the Bright Angel Flight-Free Zone is $577,000 in increased consumer costs and $383,000 in operator losses.

As previously discussed, while the FAA does not have adequate data to estimate how sensitive customers are to noticeable price increases for air tours of the Grand Canyon, the FAA does believe that commercial air tour sightseeing operators will be able to recover most of the increased costs imposed by this rule, because the price increases will usually be relative small (compared to the price of a air tour) so that most potential customers will continue to purchase air tours of the Grand Canyon. A $10 price increase a relatively small price increase probably will not have a noticeable impact demand for above fixed wing air tours. However, a $45 price increase is a large price increase and could result in a reduction in the demand for the above helicopter air tours. Therefore, the above the estimate for increased revenue from price increases ($577,000) may be an over estimate, and the estimated loss ($383,000) may be an under estimate.

Sanup Flight-Free Zone

The creation of the Sanup Flight-Free Zone in the southwest portion of GCNP restricts air traffic to one side only of the Colorado River beyond Separation Canyon. This change will effect seven fixed-wing aircraft operators offering commercial sightseeing air tours on the "Blue 2" VFR route and three helicopter operators offering commercial sightseeing air tours on the "Green 4" VFR route. Combined, these 10 GCNP commercial air tour sightseeing operators accounted for approximately $7.7 million total commercial air tour sightseeing revenue in 1995, flying approximately 16,800 commercial sightseeing air tours and 92,800 passengers.

Based on information from the Las Vegas FSDO, 90 percent of GCNP commercial sightseeing air tours conducted on the "Blue 2" and the "Green 4" VFR commercial air tour sightseeing routes turn back at or before Separation Canyon and will therefore, not be directly impacted by this change. Furthermore, there is no evidence to suggest that the remaining 10 percent of the commercial sightseeing air tours that fly beyond Separation Canyon charge a premium which would result in proportionately greater potential revenue losses. Nor is there substantiated evidence to suggest that the helicopter tours that include ground excursions inside the Hualapai Indian Reservation (a major source of revenue for this Native American tribe derived from landing rights agreements contracted with commercial air tour sightseeing operators) will be impacted because these tours typically extend only as far as Quartermaster Canyon, a point located west of Separation Canyon. The FAA therefore, concludes that this alteration to the GCNP SFRA will have neither a measurable impact on the 10 percent of commercial sightseeing air tours that fly beyond Separation Canyon nor any significant probable loss of consumer surplus.

Desert View Flight-Free Zone

No commercial sightseeing air tours are currently conducted in the vicinity of the Desert View Flight-Free Zone such that its extension to the north and east will have a direct cost impact on the GCNP commercial air tour sightseeing operators or their passengers. Costs associated with the elongation of the Zuni Point Corridor as a result of the simultaneous extensions of both the Desert View and Bright Angel Flight-Free Zones have already been accounted for. Likewise, the costs have been discussed which might be associated with a commercial sightseeing air tour option which exists GCNP to the east flying over the Painted Desert made necessary by limiting Zuni Point Corridor traffic to one-way. The FAA concludes that the expansion of the Desert View Flight-Free Zone in and of itself will have no known cost impact on GCNP commercial air tour sightseeing operators or their tour passengers other than what has already been discussed in the context of other modifications.

(4) New Curfew (Basic Fixed Flight-Free Period)

The introduction of the new curfew (basic fixed flight-free periods) for commercial air tour sightseeing operations conducted at the East-end of GCNP will result in lost revenue for those operators conducting commercial sightseeing air tours in the Zuni Point and Dragon Corridors. The reduction in time available for commercial air tour sightseeing flights in the Zuni Point and Dragon Corridors as a result of the basic fixed flight-free periods will impact just over 20.0 percent of the daily commercial sightseeing air tours offered in the summer season between May 1 and September 30, and approximately one-third of the daily commercial sightseeing air tours offered in the winter season. (The final rule defines a winter season inclusive of the month of October which, in practice, is a part of the GCNP commercial sightseeing air tour industry's summer season.)

The impact of the basic fixed flight-free periods is most likely to be realized by GCNP operators during the summer season because, as noted previously, commercial air tour sightseeing aircraft are utilized at full operational capacity during the summer season. With the introduction of a temporary freeze on the number of GCNP commercial air tour sightseeing aircraft, however, the only alternative available to GCNP commercial air tour sightseeing operators during the summer season will be to eliminate commercial sightseeing air tours which currently occur during hours included in the basic fixed flight-free period. The FAA expects that some of this loss of revenue could be recovered through ticket price increases, and some of it will be offset as a result of lower variable operating costs due to the reduced number of commercial sightseeing air tours being conducted in the summer. During the winter season, however, the FAA assumes there will be sufficient operational underutilization of aircraft such that GCNP operators will reschedule commercial sightseeing air tours currently operating during the basic fixed flight-free period into non flight-free times.

Based on 1995 estimates, the potential loss of revenue resulting from the summer curfew is nearly $1.8 million or 14.9 percent when compared with the GCNP commercial air tour sightseeing revenue of $12.3 million derived from commercial sightseeing air tours conducted on the East-end of GCNP. (When compared with the total GCNP commercial air tour sightseeing revenue of $113.1 million generated in 1995, the potential loss is 1.6 percent). The estimated amount of average annual commercial air tour sightseeing revenue for the 10-year time period 1997–2008, that could be potentially effected during the summer season, is about $2.4 million (total revenue net of variable aircraft operating cost is $1.4 million).

The FAA estimates that just under 2400 commercial sightseeing air tours will be rescheduled during the rule's basic fixed flight-free period winter season. (Comments offered by commercial sightseeing operators who addressed the curfew issue at the Scottsdale/Las Vegas public hearings, generally maintained that a curfew during the winter season would cause minimal disruption to commercial sightseeing tour schedules.) The resulting air traffic compression during non-curfew times, however, will result in some increase in aircraft activity with a corresponding increase in noise levels in GCNP during the time periods that commercial air tour sightseeing aircraft are permitted to operate.

(5) Reporting Requirements

Section 93.917 will establish operator reporting requirements. All certificate holders operating within the GCNP SFRA will incur costs due to this section during the 5-year time frame (1997 through 2001) that these reporting requirements will be in effect.

The reporting requirements for § 93.917 include:

(a) Each certificate holder will have to establish a system to codify the required information and then update this system (there are no existing reporting requirements).

(b) Three times a year, within 30 days after April 30, August 31, and December 31, each certificate holder will have to submit in writing specific information to the Las Vegas FSDO.

The FAA estimates that it will take each certificate holder one week to establish and set up the reporting system. Thereafter, each operator could use a spreadsheet program to maintain and update daily information; accordingly, a computer specialist will not be needed to set up an operator's report system. The FAA estimates that the total one-time cost in 1995 dollars for all GCNP certificated operators will be approximately $10,550 or about $340 for each operator.

After the initial set up of task 'a' above has been accomplished, updating will be required throughout the entire 5-year time frame of this recordkeeping requirement. The total amount of time needed to update this information will be a function of the number of aircraft that each operator has. The FAA assumes that it will take each operator about 10 minutes per aircraft per day to record the updated information onto a master spreadsheet. The FAA estimates the total annual cost in 1995 dollars for this task for the time period 1997–2001, will be about $70,200, or about $515 per aircraft each year.

Task 'b' above requires written information to be provided to the Las Vegas FSDO three times in each of the years 1997 through 2001. The FAA assumes this will take about one-half of an hour for each operator to compile the information, 15 minutes for each operator to fill out the generic information on the report, and an additional 5 minutes per aircraft for the specific information needed in the report. The FAA estimates the total annual cost in 1995 dollars for this task for the time period 1997–2001, will be about $900, or about $30 per operator each year.

In addition to the above detailed operator costs, the FAA will incur costs as well. FAA costs will result from the recording and tracking of the information provided by the operators. The FAA assumes this task will be handled by a GS–13 inspector (paid at the full wage, including all fringe benefits, of $34.29/hr) located at the Las Vegas FSDO; thus, no outside contractor will be needed. This inspector will need about one hour to review each operator's report or about 93 hours total each year. The FAA estimates that the total cost to the FAA of this component of the reporting requirement will be approximately $16,000, or about $3,200 annually.

For the operators, total costs sum to approximately $366,000 while the total costs for the FAA sum to approximately $16,000. The total average annual cost of the reporting requirements for the 5-year period 1997 through 2001 is about $76,400 ($73,200 for operators, $3,200 for the FAA).

Temporary Freeze on Number of Aircraft

Assuming the temporary freeze on the number of aircraft introduced with this final rule will conclude with the publication date of the final rule on GCNP Noise Limitations, the FAA estimates the potential impact will be a loss of operator total revenue of approximately $3.9 million ($2.9 million, net of variable aircraft operating costs) owing to the cancellation of nearly 2400 commercial sightseeing air tours carrying 22,350 passengers. These estimates reflect the 3.3 percent compound annual rate of growth in GCNP commercial sightseeing activity. If certain larger, more quiet aircraft are permitted to be substituted such that the total GCNP commercial air tour sightseeing fleet remains unchanged from the level imposed by the freeze, much of this loss of revenue could be negated.

Cost Summary

The FAA estimates that the average annual costs of the six changes contained in the final rule ((1) modification of the SFRA dimensions; (2) establishment of new and modification of existing flight-free zones; (3) establishment of new and modification of existing flight corridors; (4) institution of a curfew (flight-free period) on the East end of GCNP; (5) addition of reporting requirements for commercial air tour sightseeing companies operating in the SFRA; and (6) a temporary freeze on the number of aircraft) is approximately 8.0 million in potential operator revenue losses net of variable aircraft operating costs, added consumer costs, and added federal administrative costs. The breakdown by final rulemaking change(s) is as follows: 1–3) $2.9 million loss of operator revenue net of variable aircraft operating costs with an additional cost to the consumer of $740,700 in increased ticket prices associated with the establishment and modification of flight-free zones and corridors; (4) $76,000 for new operator and FAA recordkeeping and reporting requirements; (5) $1.4 million in revenue loss net of variable aircraft operating costs for the introduction of the basic fixed flight- free periods; and 6) $2.9 million in potential revenue loss net of variable aircraft operating costs resulting from the temporary freeze on the number of aircraft.

Benefits

The benefits of noise reduction attributable to this rulemaking can be broadly categorized as use and non-use benefits. Use benefits are the benefits perceived by individuals from the direct use of a

resource such as hiking, rafting, or sightseeing. Non-use benefits are the benefits perceived by individuals from merely knowing that a resource is preserved in a given state. The use benefits of this rulemaking have been estimated and are presented below. The non-use benefits attributable to this rulemaking have not been estimated, but are qualitatively discussed.

Economic studies have not been conducted specifically to estimate benefits for this rulemaking. Benefits, are therefore, estimated by combining analogous situations (with value estimates) from existing economic studies with site-specific information related to GCNP and other information to estimate benefits. Certain criteria should be applied to ensure that appropriate studies are selected for purposes of benefits estimation. The criteria used in this rulemaking are listed below.

Selected economic studies must reasonably represent the resources to be valued in terms of physical characteristics, service flows, user characteristics, and available substitutes.

Selected economic studies must be scientifically sound. Studies that are either published in peer-reviewed academic journal or are conducted by a recognized university-associated researcher or established consulting firm are considered to be scientifically sound.

Selected economic studies must use appropriate valuation methodologies. The studies selected to estimate the benefits of this rulemaking conform to each of these criteria.

The site-specific information used in the benefit estimation includes visitation data for GCNP and a visitor survey conducted to document the visitor impacts of aircraft noise within GCNP. The available visitation data for GCNP permits the categorization of visitors into the following groups: back country users (115,500 visitor days), river users, and other visitors (5,801,800 visitor days).

The GCNP visitor survey indicates that these different visitor groups are variously affected by aircraft noise (HBRS, Inc. and Harris Miller Miller & Hanson, Inc. 1993). This survey asked respondents to classify the interference of aircraft noise with their appreciation of the natural quiet of GCNP as either "not at all," "slightly," "moderately," "very much," or "extremely."

The FAA used three economic studies in estimating recreational benefits in terms of consumer surplus. Consumer surplus is the difference between the maximum amount a consumer is willing to pay and what the consumer actually pays. It is a measure of the increase in well being gained by individuals through participation in recreational. The three studies valued recreation activities in or near GCNP as hiking: $43.16 per visitor day; multi-day rafting: $128.21; and other ground sightseeing: $39.71. It is assumed that these values represent the value of participating in the indicated activities at GCNP absent any impact from aircraft noise.

These data and assumptions imply the following total lost values from all aircraft noise in 1995. The total lost value of $29.7 million was calculated as the product of the number of visitor-days, the proportion of visitors affected by aircraft noise, the visitor-day value, and the assumed proportional reduction in the visitor-day value. (See Regulatory Evaluation for details).

The benefit of this rulemaking is that portion of the total lost value that is associated with the resulting noise reduction. The indicated percent reduction in aircraft noise for each year was applied to the total lost value from all aircraft noise to yield the current use benefit for that year. Linear interpolation was used to estimate benefits between the years 1997 to 2000, and 2001 to 2008. A 3 percent discount rate was then applied to calculate the present value of use benefits over the 12 year regulatory evaluation period. Using a 7 percent discount rate, the present value of the benefits is $136.2 million.

The FAA and the NPS believes that the true representation of benefits from the rule are reflected by the 3 percent discount rate with a resulting value of $172,416,000. Economics literature supports a 3 percent discount rate for natural resource valuation (e.g., Freeman 1993), and recent Federal rulemaking also support a 3 percent discount rate for natural resource valuation (61 FR 453; 61 FR 20584).

Summarizing the above results, the FAA estimates the discounted use benefits of this final rulemaking during the 12-year period 1997–2008 to be $172 million discounted at three percent. In addition to these use benefits, this rulemaking would likely generate non-use benefits. The FAA does not have adequate data to estimate non-use benefits of aircraft noise reduction at the Grand Canyon. However, there are other studies that do suggest the possible existence of significant non-use benefits that can be attributed to this rulemaking.

Benefit/Cost Comparison

The total present value cost (operator revenue loss net of variable aircraft operating costs, ticket price increases, and recording costs) of the final rule will be $42.1 million. The total present value

of benefits are $172.0 million. Since the total costs are less than the total benefits, the FAA contends that the final rule will be cost beneficial.

Final Regulatory Flexibility Analysis

By both law and executive order, Federal regulatory agencies are required to consider the impact of final regulations on small entities. Executive Order 12866 "Regulatory Planning and Review", dated September 30, 1993, states that:

Each agency shall tailor its regulations to impose the least burden on society, including individuals, businesses of different sizes, and other entities (including small communities and governmental entities), consistent with obtaining the regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations.

The 1980 "Regulatory Flexibility Act" (RFA), as amended, requires Federal agencies to prepare a final regulatory flexibility analysis of each final rule that will have a significant economic impact on a substantial number of small entities. The definition of small entities and guidance material for making determinations required by the RFA are contained in the *Federal Register* (47 FR 32825; July 29, 1982).

With respect to this final rule, a "small entity" essentially is a commercial sightseeing air tour operator owns or operates nine or fewer aircraft. A significant economic impact on a small entity is defined as an annualized net compliance cost to such a small commercial air tour sightseeing operator. In the case of scheduled operators of aircraft for hire having fewer than 60 passenger seats, a "significant economic impact" or cost threshold, is defined as an annualized net compliance cost level that exceeds $69,800; for unscheduled operators the threshold is $4,900. A substantial number of small entities is defined as a number that is more than one-third of the small commercial sightseeing operators (but not less than eleven operators) subject to the final rule.

The Federal Aviation Administration has determined that this final rule and the NPRM that is being published simultaneously, will have a significant economic impact on all commercial sightseeing operators conducting flights within Grand Canyon National Park, and, therefore, has prepared this final regulatory flexibility analysis of the final rule. A separate regulatory flexibility analysis of the NPRM is contained in that document. The analysis, structured in accordance with section 604 of the RFA as amended requires the following:

1. A succinct statement of the need for and objectives of the final rule;

2. A summary of the significant issues raised by public comments in response to the initial regulatory flexibility analysis, a summary of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments;

3. A description of and an estimate of the number of small entities in which the rule will apply or an explanation of why no such estimate is available;

4. A description of the projected reporting, recordkeeping and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for the report or record; and

5. A description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

Why FAA Action is Being Considered: The final rule to establish noise limitations for certain aircraft operations in the vicinity of the Grand Canyon National Park stems from the need to further reduce the impact of aircraft noise on the park environment and to assist the National Park Service in achieving its statutory mandate imposed by Pub. L. 100–91 to provide for the substantial restoration of natural quiet and experience in the Grand Canyon National Park.

Significant Issues Raised by Public Comments: Only one commenter specifically addressed the impact on small businesses. The Small Business Administration (SBA) questioned the findings of the regulatory flexibility analysis contained in the NPRM with respect to the impact on small tour operators because revenue losses were assessed at the aggregate level. The SBA also suggested that a different compliance and reporting requirement or different timetables for small entities should be explored, that the FAA propose performance rather than design standards, and that small entities be considered for exemption

from all or part of the rule requirements. The FAA has reviewed the SBA's comment and, they are discussed in the alternatives section of this analysis.

The SBA also suggested that it would be appropriate to use elasticity of demand information to calculate the extent to which small businesses will recoup costs by increasing fares. The data for this segment of the population, however, are not available, but this issue is discussed in the full regulatory analysis of the final rule. The SBA also had suggested that the FAA evaluate data on profits which "may be available from Dun and Bradstreet." However, data on actual profits from very small entities that would be affected by this proposal are not publicly available from the recommended source or within the public docket. In addition, the SBA believes that the FAA has not fully considered other significant options. Given both the qualitative and quantitative costs and benefits, the FAA believes that the best option that minimizes costs and maximizes benefits was chosen. With regard to other concerns made by the SBA, the FAA has taken these comments into consideration in producing the final RFA and in estimating costs associated with this rulemaking.

Description and Estimated Number of Small Entities Effected: The rulemaking will affect commercial air tour sightseeing operators conducting flights over the Grand Canyon National Park under 14 CFR part 135. FAA data shows that in 1995, there were 26 potentially affected small commercial sightseeing operators, each owning, but not necessarily operating 9 or fewer aircraft. These operators owned a total of 70 aircraft and the average fleet consisted of about 3 airplanes. The FAA estimates that these 26 operators, will be impacted by the final rule.

Cost of Compliance to Small Entities

Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule

Section 93.917 will establish operator reporting requirements. All certificate holders operating within the GCNP SFRA will incur costs due to this section during the five-year time frame (1997 through 2001) that these reporting requirements will be in effect.

The reporting requirements for section 93.917 include:

(a) Each certificate holder will have to establish a system to codify the required information and then update this system.

(b) Three times a year, within 30 days after April 30, August 31, and December 31, each certificate holder will have to submit in writing specific information to the Las Vegas FSDO.

In developing these costs, the FAA assumes that each operator maintains an existing list of what each one of his/her aircraft is doing each day. The operators require this information for maintenance planning purposes, and such a list will include how many hours are left before the next scheduled inspection and how many flights can be flown before it is due. Since the operators already have this information, the FAA assumes that it could be loaded into a spreadsheet program. The FAA also assumes that the total amount of time needed to process and compile the information is a function of the number of airplanes that the operator has. This work could most likely be performed by a flight dispatcher.

The FAA estimates that it will take each certificate holder one week to establish and set up the reporting system. Thereafter, each operator could use a spreadsheet program to maintain and update daily information; accordingly, a computer specialist will not be needed to set up an operator's reporting system.

The recordkeeping requirement described above will have to be updated throughout the entire five-year time frame. The total amount of time needed to update this information will be a function of the number of aircraft that each operator has. The FAA assumes that it will take each operator about 10 minutes per day to record the updated information onto a master spreadsheet.

In addition, the required information is to be provided to the Las Vegas FSDO three times in each of the years 1997 through 2001. The FAA assumes that this will take about one-half of an hour for each operator to compile the information, 15 minutes for each operator to fill out the generic information on the report and an additional 5 minutes per aircraft for the specific information needed in the report.

The FAA estimates that compliance with the final rule's recordkeeping requirements will impose an additional 61 hours of labor per aircraft each year once the initial set-up of a reporting system had been accomplished. The average annual cost per aircraft will be about $515, but the average annual cost per affected operator will depend on an operator's fleet size. The one-time initial set-up cost for each operator regardless of fleet size will be about $340.

All commercial air tour sightseeing operators will be subject to the recordkeeping requirement costs. The FAA estimates that the maximum annual cost of this requirement will be about $540 per aircraft.

If an operator has nine aircraft (the maximum allowable number of aircraft owned to be considered a "small entity"), that operator's annual cost will be about $4,860, which is about $40 below the thresholds for significant cost for scheduled and unscheduled operators.

Zuni Point Corridor

Of the final rule changes, one of the most costly—in terms of increased tour lengths, increased consumer prices, and increased traffic in the Dragon Corridor—will be the restriction of one-way traffic in the Zuni Point Corridor. This change, however, will only impact at most five operators currently offering a two-way tour of the Zuni Point Corridor. The number of operators affected by this requirement is less than one-third of all GCNP commercial air tour sightseeing operators. Thus, a substantial number of small operators will not be significantly impacted.

Basic Fixed Flight-Free Periods

Only the commercial air tour sightseeing operators based in Tusayan or those who have flights entering the GCNP SFRA from the east end of the Grand Canyon will be subject to the basic fixed flight-free periods. The FAA estimates that the average annual cost of this requirement to these operators will be about $30,500 in net operating revenue loss per aircraft on average. Any operator with 9 or fewer aircraft will incur costs that exceed the threshold for significant costs for unscheduled ($4,900) operators, and any operator with from 4 to 9 aircraft will exceed the threshold for significant costs for scheduled ($69,800) operators. Five of the 31 operators conducting commercial sightseeing air tours of GCNP own more than 9 aircraft and will not be considered a "small entity". Six operators own between four and nine aircraft. Thus, this final requirement will not have a significant economic impact on a substantial number of small entities, because only a maximum of six operators out of 31 will be significantly impacted.

The final rule will affect certain operators who conduct air tours between Las Vegas and Tusayan. Currently, these operators follow the Colorado River inside the GCNP during part of that flight. All these operators will no longer be allowed to conduct this flight along the Colorado River, as a result of this final rule. This rule changes these 12 operators from airtour operators to commuter operators.

The FAA estimates that using 1995 as a baseline, the above 12 operators with 82 aircraft will incur average annual revenue losses, net of variable operating costs, of $2,397,900. Therefore, the net impact per aircraft will be about $29,200 ($18,900 discounted). Assuming as a worse case, that all of these operators are unscheduled (which they are not), then the threshold for significant costs would be $4,900. Therefore, all of the operators would suffer a significant economic impact. However, there are only nine small operators (29 percent) that will be adversely affected. The FAA concludes that a substantial number of small entities will not be significantly impacted.

Description of Alternative Actions

This rule is somewhat unique in that most of the economic impact of the rule falls upon small businesses. Consequently, all alternatives considered during formulation of this final rule are actually alternatives related to small entities. Numerous alternatives have been suggested and considered by the many forums that have studied the issue since 1986 when the FAA issued SFAR No. 50 that established flight regulations in the vicinity of the Grand Canyon. In 1994, the DOI submitted a report to Congress containing recommendations for restoring natural quiet in the park. Alternatives that were recommended to be considered, separately or in concert, included simplification of the commercial air tour sightseeing route structure, expansion of the flight-free zones, phased-in use of quieter aircraft, technology, separation of park ground visitors and air tour overflights, exploiting natural attenuation, reducing duration of noise intrusions, and encouraging use of greater payload aircraft. Many combinations of all of these alternatives or recommendations were considered in developing this rule. The NPRM, inviting public comment was published July 31, 1996. The following month, on August 21, the NPRM Draft Environmental Assessment was published in the *Federal Register* inviting further public comment. Public hearings were held September 16–20 in Scottsdale, Arizona and Las Vegas, Nevada to obtain additional public comment on the NPRM and the draft environmental assessment. Finally, Congressional hearings were held on the issue October 10–11, 1996.

To recount all the alternatives and combination of alternatives that were considered as a result of these actions is beyond the scope of this analysis. Clearly, however, the two primary goals of this rule are to (1) restore natural quiet, and (2) preserve the opportunity for the public to enjoy air tours at GCNP. Integrally connected with the second goal is preservation of the air tour industry serving the park, which is primarily composed of small entities.

Probably the only alternative not considered was to extend the compliance period beyond the year 2008. This alternative was rejected because the President's Memorandum dated April 22, 1996 directed that restoration of the natural quiet be accomplished by 2008. The FAA believes that the least burdensome way for small entities to accomplish restoration of natural quiet by 2008 is through the requirements of this final rule and the NPRM being published at the same time. A brief discussion of specific alternatives to reduce the impact on small entities suggested by the SBA in that agency's comments on the NPRM is as follows:

Lessen Projected Reporting and Recordkeeping Requirements

The FAA considered several ways to lessen the impact of these requirements on small entities. The first way was to not require any reporting by small entities. Another was to require the identical reporting requirements on each firm, regardless of the size of that firm. The third was to tailor the reporting to the size of the firm.

The FAA rejected the first alternative because the vast majority of the firms are small entities. Collecting the information from only large entities would not be useful to establish accurate information on GCNP overflights for noise and safety management purposes. In addition, the FAA would not be able to validate FAA and NPS noise models for use in noise mitigation studies or determine with precision when and where noise mitigation is required. Finally, the FAA would have no basis for creating a more flexible and adaptable noise management system.

The second alternative was to require identical reporting requirements regardless of firm size. This alternative was also rejected because larger firms with more aircraft are likely to create more noise than smaller firms with fewer aircraft. The FAA does not believe that it is reasonable to burden all firms with the identical requirements. The FAA also believes that some information would be lost (if the reporting requirements were made too lenient) or too much unnecessary information would be obtained if all operators had the identical requirements.

The third (chosen) alternative tailored the recordkeeping requirements to the size of the firm. As documented in the regulatory evaluation, much of the information that is being requested is based on the number of aircraft an operator owns or operates. That is, a smaller firm with fewer aircraft would be burdened less than a larger firm with more aircraft.

Propose Performance Based Standards

The SBA suggested that the FAA consider the use of performance rather than design standards as applied to small entities. The FAA is interested in taking advantage of the benefits of performance standards. The agency completed a major study in April, 1996 called "Challenge 2000" to serve as a guide for a comprehensive change program for the FAA to provide essential regulation and enforcement services. These services would be provided with expected levels of resources into the next century. One recommendation of that study was for the agency to evolve performance based regulations. Although the FAA did not identify an opportunity to implement any performance regulations in the final rule, some evolution in that direction is contained in the NPRM being issued simultaneously with this final rule. In the NPRM, aircraft are categorized in accordance with their noise performance, and the noisier performers are proposed to be phased out of air tour service in the vicinity of GCNP.

Exempt Small Entities From Some Provisions of the Rule

The SBA commented that the FAA should explore a much more aggressive approach in considering this alternative. The FAA has attempted to minimize the economic impact of restoring quiet to the park on air tour operators, most of which are the small entities impacted by this rule. But if small entities, which comprise 26 of the 31 operations impacted were exempted from any operational provisions of the rule, the goal of restoring natural quiet to the Grand Canyon would not be achieved. Based on the above discussion, the FAA sees no practical way to exempt small entities from any of the provisions of the final rule.

Statement of Legal and Policy Reasons for Adopting the Rule

The FAA is directed to promote the safe flight of civil aircraft in air commerce by Subtitle VII Part A of Title 49, United States Code. As such, it is the only agency empowered to control aircraft flight in U.S. airspace. Further, Section 3 of Pub. L. 100–91, commonly known as the National Park Overflight Act, mandated substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight.

The primary policy reason for adopting this rule, is that it is the best compromise the FAA has been able to formulate to achieve the mandate of Pub. L. 100–91 and maintain a viable air tour industry

serving GCNP. Further, the President published a memorandum in the *Federal Register* on April 22, 1996 requiring that the goal of restoration of natural quiet as defined by the Secretary of the Interior in accordance with the Overflights Act be completed in the park no later than April 22, 2008.

International Trade Impact Assessment

The FAA has determined that the rulemaking will not affect non-U.S. operators of foreign aircraft operating outside the United States or U.S. trade. It could however, have an impact on commercial air tour sightseeing at GCNP, much of which is foreign.

These changes will effectively reconfigure GCNP flight-free zones and flight corridors, reduce the time available for commercial sightseeing air tours to be conducted and in some cases, prolong the time a commercial air tour sightseeing passenger spends in an airplane not necessarily sightseeing. To the extent a commercial sightseeing air tour of GCNP is perceived to be a devaluation in the current service offered, commercial air tour sightseeing could be impacted concomitant with a potential loss of revenue.

The United States Air Tour Association estimates that 60 percent of all commercial sightseeing air tourists in the United States are foreign. The Las Vegas FSDO, however, believes this estimate to be considerably higher at GCNP, perhaps as high as 90 percent. The FAA cannot put a dollar value on the portion of the potential loss in commercial air tour sightseeing revenue associated with the loss of foreign tour dollars.

Federalism Implications

The regulations herein would not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12866, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Paperwork Reduction Act

Section 93.317 contains information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA submitted a copy of this section to the Office of Management and Budget (OMB) for its review, and has received a 1-year clearance to obtain this information (OMB Control No. is 2121–0602).

Conclusion

This rule will reduce the impact of aircraft noise on the park environment in the Grand Canyon. The combination of expanded flight-free zones and closure of the Fossil Corridor will make significant progress toward achieving the NPS's goal of substantial restoration of natural quiet. The NPRM being published today would further assist in accomplishing this goal by a combination of requirements that would limit future use of noisier aircraft and that would provide incentives for the use of quieter aircraft. The initial aircraft phaseout proposed in the accompanying notice, in conjunction with this rule, would provide a significant reduction in noise and make a major contribution toward achieving the Congressional mandate of substantial restoration of natural quiet by the year 2000. Modeling shows that, if the phaseout is adopted as proposed, the substantial restoration objective would be exceeded by 2008. The phase out of noisier aircraft would ensure substantial restoration of natural quiet under conditions where additional noise efficient aircraft are added to the commercial sightseeing fleet as predicted in forecasting models.

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this final rule is a significant regulatory action under Executive Order 12866. In addition, the FAA certifies that this final rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This final rule is considered significant under DOT Regulatory Policies and Procedures.

Other Actions

Comprehensive Noise Management Plan

The rule reflects the understanding of the FAA and NPS that the conversion of the commercial sightseeing aircraft fleet operating in the SFRA to a more noise efficient fleet is the most promising approach to providing for the substantial restoration of natural quiet mandated by Pub. L. 100–91 and allowing for some measure of growth in the commercial sightseeing industry. To ensure that the rule provides the fairest solution for all parties involved, the FAA and NPS are committed to the joint

development of a noise management plan no later than five years after May 1, 1997, the effective date of this rule. It will provide for a more adaptive management system, full resolution of all monitoring and modeling issues, additional public input, and the provision of improved incentives to invest in noise efficient aircraft. The purpose is to further refine the proposal (proposed § 93.319) in the NPRM regarding Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park, published concurrently with this final rule, with the intent of providing for substantial restoration of natural quiet mandated by Pub. L. 100–91. To ensure development of a flexible and adaptive approach to noise mitigation and management, this plan will, at a minimum, (1) address development of a reliable aircraft operations and noise database, (2) validate and document the most effective uses for FAA and NPS noise models in GCNP, (3) explore how the conversion to a noise efficient fleet can most effectively contribute to the substantial restoration of natural quiet while allowing for growth in the industry, and how, in this context, incentives can best be provided to promote this conversion. The FAA and NPS are committed to an open process that will provide for full public involvement and consultation with Native American tribes.

Park Air Operations

GCNP has one of the most strictly regulated aviation programs within the NPS and the DOI. The park limits use of its contracted aircraft to activities involving life or health-threatening emergencies, administration and/or protection of resources, and for individually approved special purpose missions. Each flight request is reviewed to ensure that it is the most efficient, economical, and effective method of performing the required task consistent with NPS and GCNP goals. These goals include the protection of natural quiet and experience, as reinforced by the park's recently approved General Management Plan. At the earliest possible date, consistent with contracting requirements and budgetary constraints, GCNP will convert to the quietest aircraft available that would also meet mission requirements.

Route Design and Modification

Recognizing that the design/location of tour routes within the SFRA is another critical component in achieving the substantial restoration of natural quiet in GCNP, the FAA, after consultation with the NPS, has proposed air tour routes in a separate notice issued concurrently with this final rule. These routes were designed in light of safety, noise mitigation, and economic considerations. The FAA welcomes and will consider any and all comments regarding these proposed routes, including those received through government-to-government consultation with Native American tribes. Any subsequent modifications to these routes would entail a similar process utilizing the same considerations.

Adoption of Amendments

Accordingly, the Federal Aviation Administration (FAA) amends 14 CFR parts 91, 93, 121, and 135 effective May 1, 1997.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

Special Federal Aviation Regulation 50–2

Special Flight Rules in the Vicinity of Grand Canyon National Park

Adopted: February 21, 1997 **Effective: May 1, 1997**

(Published in 62 FR 8862, February 26, 1997)
(Corrected in 62 FR 11768, March 13, 1997 and 62 FR 12687, March 17, 1997)

SUMMARY: On December 31, 1996, the FAA published a final rule that codifies the provisions of Special Federal Aviation Regulation (SFAR) No. 50–2, Special Flight Rules in the Vicinity of Grand Canyon National Park (GCNP); modifies the dimensions of the GCNP Special Flight Rules Area; establishes new and modifies existing flight-free zones; establishes new and modifies existing flight corridors; establishes reporting requirements for commercial sightseeing companies operating in the Special Flight Rules Area; prohibits commercial sightseeing operations during certain time periods; and limits the number of aircraft that can be used for commercial sightseeing operations in the GCNP Special Flight Rules Area. This action delays the effective date for 14 CFR §§ 93.301, 93.305, and 93.307 of the final rule and reinstates portions of and amends the expiration date of SFAR No. 50–2. This action does not affect or delay

the implementation of the curfew, aircraft restrictions, reporting requirements or the other portions of the rule.

DATES: The effective date of May 1, 1997, for 14 CFR §§ 93.301, 93.305, and 93.307, is delayed until 0901 UTC January 31, 1998. SFAR No. 50–2 is reinstated and amended effective 0901 UTC May 1, 1997. SFAR No. 50–2, Sections 2, 3, 6, 7 and 8 are removed effective 0901 UTC May 1, 1997.

Comments must be received on or before March 24, 1997.

ADDRESSES: Comments should be mailed, in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC–200), Docket No. 28537, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be sent electronically to the Rules Docket by using the following Internet address nprmcmts@mail.faa.dot.gov. Comments must be marked Docket No. 28537. Comments may be examined in the Rules Docket in Room 915G on weekdays between 8:30 a.m. and 5:00 p.m., except on Federal holidays.

FOR FURTHER INFORMATION CONTACT: Mr. Neil Saunders, Airspace and Rules Division (ATA–400), Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–8783.

SUPPLEMENTARY INFORMATION:

Request for Comments on the Rule

Although this action is a final rule, and was not preceded by notice and public procedure, comments are invited on the rule. This rule will become effective on the date specified in the "DATES" section. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in evaluating the effects of the rule, and in determining whether additional rulemaking is required.

History

On December 31, 1996, the FAA published three concurrent actions (a final rule, a Notice of Proposed Rulemaking (NPRM), and a Notice of Availability of Proposed Commercial Air Tour Routes) in the *Federal Register* (62 FR 69301) as part of an overall strategy to reduce further the impact of aircraft noise on the park environment and to assist the National Park Service (NPS) in achieving its statutory mandate imposed by Public Law 100–91. The final rule amends part 93 of the Federal Aviation Regulations and adds a new subpart to codify the provisions of SFAR No. 50–2; modifies the dimensions of the GCNP Special Flight Rules Area; establishes new and modifies existing flight-free zones; reestablishes new and modifies existing flight corridors; and establishes reporting requirements for commercial sightseeing companies operating in the Special Flight Rules Area. In addition, to provide further protection for park resources, the final rule prohibits commercial sightseeing operations in the Zuni and Dragon corridors during certain time periods, and places a temporary limit on the number of aircraft that can be used for commercial sightseeing operations in the GCNP Special Flight Rules Area. These provisions become effective on May 1, 1997.

An NPRM, Notice No. 96–15, proposing to establish noise limitations for certain aircraft operating in the vicinity of GCNP was also published with a comment period that closes on March 31, 1997.

Finally, a Notice of Availability of Proposed Commercial Air Tour Routes for the GCNP was published with a 30-day comment period that closed on January 31, 1997. This Notice requested comment on the proposed new or modified existing air tour routes, which complement the final rule affecting the Special Flight Rules in the Vicinity of GCNP.

Petitions

By petition dated January 15, 1997, the Aircraft Owners and Pilots Association requested that the FAA reconsider the rule because of its perceived negative impact on the general aviation community and the fact that general aviation traffic does not contribute to the issues addressed by the final rule.

On January 30, 1997, the Clark County Department of Aviation, et al., filed a petition seeking reconsideration and/or a stay of effectiveness of the implementation of the Toroweap/Shinumo Flight-Free Zone that will bar the use of the current "Blue 1" commercial air tour route until the FAA has taken adequate steps to assure the availability of an adequate alternative for Las Vegas based air tour operators.

On January 31, 1997, the Grand Canyon Air Tour Coalition (Coalition) requested a stay of the effective date arguing that the necessary pilot training and certification could not be reasonably and safely completed prior to the May 1, 1997, effective date. The petition also alleged that discontinuing and limiting existing tour routes as of May 1, 1997, would disrupt the travel plans of a substantial portion of GCNP visitors, and air tour operators would be forced to dishonor contractual obligations based on material printed prior to August 1996. (This administrative action is separate from but interrelated to a Petition for Review filed by the Coalition in the Court of Appeals for the District of Columbia Circuit, *Grand Canyon Air Tour Coalition* v. *FAA,* (Case No. 97–1003)).

On February 18, 1997, the Grand Canyon Trust, et. al., (Trust) filed a request with the FAA opposing the Coalition's request for stay of the final rule and urged the FAA to deny the Coalition's request. The Trust argued that the Coalition has not presented valid grounds to support its stay request.

Even though the specific Petitions filed with the FAA focus on different aspects of the operating environment within the Park, the underlying concepts of the three Petitions are similar in nature. All three administrative Petitions are concerned with the air tour route structure or its implementation.

In support of the requests for a stay of the effective date, the Petitions have alleged several economic and safety concerns. The economic concerns are inextricably tied with the implementation of the new routes in the Park. As will be discussed below, if the implementation of the new routes is delayed, the economic concerns are, at a minimum, also delayed. In essence, the safety concerns stem from the Petitioners' position that there is not enough time to train and certify all operators and pilots for operations on the new Grand Canyon routes that are scheduled to be in place on May 1, 1997, and that this would create an inherently unsafe situation in the Grand Canyon. The FAA strongly disagrees with this assertion that implementing the new routes effective May 1, 1997, would be unsafe. Even though the FAA is committed to achieving the substantial restoration of natural quiet in the Park as soon as possible, safety is, and always will be, paramount. To that end, the FAA has been preparing to take dramatic steps to alleviate any potential problems that could adversely affect the safety in the Park on May 1, 1997, by arranging for additional inspectors to be available for the operators to complete the training on the new routes prior to the May 1, 1997, effective date. The FAA would never permit an unsafe situation to take place at the Grand Canyon.

While the FAA has been diligently working toward a May 1, 1997, implementation date for the entire rule, the Agency has also been reviewing comments concerning proposed routes and working toward the establishment of these routes. During the process of establishing the new routes in response to the final rule, the FAA has met with aviation users, Park users, and Native Americans. Several new and innovative ideas were offered by those groups. Many of these creative ideas suggest alternatives to both the existing environment at the Park and the proposed environment that could significantly improve the operating situation in both the environmental and operational arenas. These new suggestions have not yet been adequately explored, but are deserving of further investigation and analysis. Additional time would afford the FAA and the Department of the Interior (DOI) an opportunity to review these new ideas. In addition, the FAA is committed to a continued working relationship with the affected Native American tribal units, and the FAA intends to complete consultation with the affected Native American tribes concerning these new route suggestions pursuant to Section 106 of the National Historic Preservation Act. Although the FAA is fully prepared to implement the new route structure on May 1, 1997, as originally proposed, it would be extremely difficult to accommodate the new proposals now being discussed by that date.

The FAA has consulted with the DOI concerning the new suggestions received by the FAA and the need for further consultation. The DOI reexamined the situation at the Park and concluded that the implementation of the curfew as required by the final rule on May 1, 1997, will, on its own, be a significant step to achieving the substantial restoration of natural quiet in the Park. The subsequent implementation of the new air tour route structure, together with the proposal of quiet technology, will form the basis for the next step towards the substantial restoration of natural quiet. The DOI and the FAA have determined that additional time would be beneficial to permit the further exploration of these new ideas submitted by the affected and interested parties, and that a delay in the effective date of the implementation of the new routes in the Park is warranted. Therefore, to permit continued discussions on, and possible changes to, the proposed new routes and to permit further consultation with the Native American tribes, the FAA has determined to delay the effective date of the expansion of the flight-free zones and minimum altitudes as stated in 14 CFR §§ 93.301, 93.305 and 93.307 to January 31, 1998. The effective date of May 1, 1997, for all the other aspects of the rule, i.e., the curfew, aircraft limitations, and reporting requirements, will remain unchanged.

Since the FAA is delaying certain portions of the final rule, as stated above, SFAR 50–2 must be reinstated, and certain portions of the SFAR be extended. The continuation of the SFAR is vital

to maintain the existing environmental and safety benefits. Specifically, the FAA finds it necessary to amend Section 9 of the reinstated SFAR 50–2 to extend the provisions of Sections 1, 4, and 5, (i.e., the Special Flight Rules Area, the flight-free zones and the minimum flight altitudes) until January 31, 1998. The termination of SFAR 50–2 Sections 1, 4, and 5 will coincide with the delayed effective date of 14 CFR §§ 93.301, 93.305, and 93.307.

On May 1, 1997, the provisions of the final rule that are unaffected by the pending route structure will go into effect. These provisions consist of the curfew, aircraft limitations, and reporting requirements, and are contained in 14 CFR §§ 93.303, 93.309, 93.311, 93.313, 93.315, 93.316, and 93.317. To avoid redundancy and confusion, the FAA also finds it necessary to remove certain sections of SFAR 50–2 effective May 1, 1997. Sections 2, 3, 6, 7, and 8 will be removed on May 1, 1997 to coincide with the implementation of the above referenced sections of the final rule contained in part 93.

Further Consultation and Review

As mentioned above, during the comment period on the new routes, the FAA received many insightful and cogent comments on the proposed route structure. Consultation with the Native American representatives also produced several useful and valid alternate operational schemes. Many of these ideas received from the comments and through the consultations are innovative and may prove to be quite beneficial for both the safety and the environmental arenas. A good example of this concerns the direction of air tour traffic in the eastern side of the Park, e.g. in the Dragon Corridor. The FAA's preliminary view that traffic should operate in a clockwise direction is being revisited, based on comments from the air tour operators as well as from NPS. With new considerations given by the operators, the existing direction of traffic operations, ie., counterclockwise, may be the more safe and environmentally sound decision.

The FAA has determined that the responses to the proposed routes should be further analyzed prior to implementation of airspace changes. Therefore, in light of the comments and additional information received, the FAA will reexamine the proposed route structure in relation to the operating environment in the Park. The FAA expects to revisit the proposed route structure and incorporate several of the above mentioned ideas. Involvement of the interested and affected parties will be crucial in this process.

Notice and Comment

As is explained below, this final rule is being issued without prior notice and comment because of the time constraints. The FAA spent the month of January and most of February receiving and reviewing comments on the proposed routes and consulting with the various affected parties. Had the FAA not received the valuable information on the route structure that it did, the FAA would have been able to transmit the data on the proposed routes to the proper charting authorities (the National Ocean Service (NOS)), and an aeronautical chart would have been available by at least April 1, 1997, that would have been used by the operators for training and navigational purposes. To have the appropriate chart produced by April 1, the FAA would have had to forward the charting data to NOS by February 21, 1997. However, once the FAA started to receive the relevant information from the commenters, the Agency had to make a determination as to whether to proceed with the proposed routes so as to have the routes and the complete Grand Canyon final rule effective and implemented on May 1, or whether to take additional time to analyze the comments and possibly develop a better and more comprehensive route structure that would not go into effect until after the busy summer tourist season.

Further, officials of the Park and NPS had suggested alterations and refinements in the route structure that have the potential to produce noise reduction benefits. They have requested the opportunity to explore these new options with the FAA. Both the FAA and the DOI believe that all these suggested changes could produce a significantly better rule for both the Park users and the aviation operators. Additional time is needed, however, to review, analyze, and implement these route changes, which, again, would preclude a May 1, 1997, effective date.

To permit what the FAA and the DOI believe will culminate in a better overall route structure, the FAA has decided not to send the originally proposed routes to NOS for charting, but to analyze the new ideas with the expectation of creating better routes. Due to the specific and strict requirements of NOS for the charting preparation time, any further alteration to the route structure, such as the ones suggested by DOI and interested parties, make it impossible to meet the charting date necessary for a May 1 effective date. A delay in the charting data to NOS would mean that NOS would not have been able to produce the charts by April 1 and, consequently, operators would not have been able to train their pilots by May 1. Essentially, therefore, any delay in sending the data to NOS results in an equivalent delay of the effective date. With the goal to produce the best routes possible, the FAA determined that it would be contrary to the public interest to implement the originally proposed

routes when better alternatives might be available as a result of the comments received and the consultations with DOI and others.

Moreover, past experience has demonstrated that the training of pilots on new routes during a peak tourist season could be unsafe. At the Park, the peak season extends approximately from May through October. To eliminate the potential for unsafe operations within the Park, the FAA further determined that the training should take place in the Park when the volume of air traffic traditionally decreases, i.e., after the summer tourist season. For that reason, the FAA is delaying the effective date of the new airspace and route structure until January 31, 1998, to give the operators sufficient time to train their pilots adequately and safely after the close of the busy summer season. Therefore, the FAA finds that there is sufficient justification under 5 U.S.C. 553(b) to issue this rule without notice and an opportunity for comment. However, while there is not sufficient time to allow prior notice and comments concerning the FAA decision to delay the May 1 effective date, we invite comments concerning any other aspect of this notice, including the new implementation date of January 31, 1998.

Economic Evaluation

In promulgating the final rule for Special Flight Rules in the Vicinity of the GCNP, the FAA prepared a cost-benefit analysis of the rule. The delay in the implementation of 14 CFR §§ 93.301 and 93.307 will not affect that assessment. The delay in the implementation of § 93.305 will be cost-relieving.

Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended, FAA completed a final regulatory flexibility analysis of the final rule. The delay in the implementation of 14 CFR §§ 93.301, 93.305, and 93.307 will not have an effect on that analysis.

Federalism Implications

The amendment set forth herein will not have substantial direct effects on the States, or the relationship between the national Government and the State, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this amendment does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Accordingly, the Federal Aviation Administration (FAA) amends 14 CFR parts 91, 93, 121, and 135 effective May 1, 1997.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

SFAR No. 50–2 [Reinstated]

In parts 91, 121, and 135, Special Federal Aviation Regulation No. 50–2 is reinstated, and Sections 2, 3, 6, 7, and 8 are removed.

In parts 91, 121, and 135, Special Federal Aviation Regulation No. 50–2, Section 9 is revised to read as follows:

Section 9. *Termination Date.* Section 1. *Applicability*, Section 4. *Flight-Free Zones*, and Section 5. *Minimum Flight Altitudes*, expire on 0901 UTC, January 31, 1998.

Special Federal Aviation Regulation 50–2

Special Flight Rules in the Vicinity of the Grand Canyon National Park, AZ

Section 1. *Applicability.* This rule prescribes special operating rules for all persons operating aircraft in the following airspace, designated as the Grand Canyon National Park Special Flight Rules Area:

That airspace extending upward from the surface up to but not including 14,500 feet MSL within an area bounded by a line beginning at Lat. 36°09′30″ N., Long. 114°03′00″ W.; northeast to Lat. 36°14′00″ N., Long. 1130°09′50″ W.; thence northeast along the boundary of the Grand Canyon National Park to 36°22′55″ N., Long. 112°52′00″ W.; to Lat. 36°30′30″ N., Long. 112°36′15″ W. to Lat. 36°21′30″ N., Long. 112°00′00″ W. to Lat. 36°35′30″ N., Long. 111°53′10″ W. to Lat. 36°53′00″ N., Long. 111°36′45″ W. to Lat. 36°53′00″ N., Long. 111°33′00″ W.; to Lat. 36°19′00″N., Long. 111°50′50″ W.; to Lat. 36°17′00″ N., Long. 111°42′00″ W.; to Lat. 35°59′30″ N., Long. 111°42′00″ W.; to Lat. 35°57′30″ N., Long. 112°03′55″ W.; thence counterclockwise via the 5 statute mile radius of the Grand Canyon Airport airport reference point (Lat. 35°57′09″ N., Long. 112°08′47″ W.) to Lat. 35°57′30″ N., Long. 112°14′00″ W.; to Lat. 35°57′30″ N., Long. 113°11′00″ W.; to Lat. 35°42′30″ N., Long. 113°11′00″ W.; to 35°38′30″ N; Long. 113°27′30″ W; thence counterclockwise via the 5 statute mile radius of the Peach Springs VORTAC to Lat. 35°41′20″ N., Long. 113°36′00″ W; to Lat. 35°55′25″ N., Long. 113°49′10″ W.; to Lat. 35°57′45″ N., 113°45′20″ W.; thence northwest along the park boundary to Lat. 36°02′20″ N., Long. 113°50′15″ W; to 36°00′10″ N., Long. 113°53′45″ W.; thence to the point of beginning.

Section 2. *Definitions.* [Removed]

Section 3. *Aircraft Operations: General.* [Removed]

Section 4. *Flight-Free Zones.* Except in an emergency or if otherwise necessary for safety of flight, or unless otherwise authorized by the Flight Standards District Office for a purpose listed in Section 3(5), no person may operate an aircraft in the Special Flight Rules Area within the following areas:

(a) *Desert View Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 35°59′30″ N., Long. 111°46′20″ W.; to 35°59′30″ N., Long 111°52′45″ W.; to Lat. 36°04′50″ N., Long 111°52′00″ W.; to Lat. 36°06′00″ N., Long. 111°46′20″ W.; to the point of origin; but not including the airspace at and above 10,500 feet MSL within 1 mile of the western boundary of the zone. The area between the Desert View and Bright Angel Flight-Free Zones is designated the "Zuni Point Corridor."

(b) *Bright Angel Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 35°59′30″ N, Long 111°55′30″ W.; to Lat. 35°59′30″ N, Long 112°04′00″ W.; thence counterclockwise via the 5-statute mile radius of the Grand Canyon Airport point (Lat. 35°57′09″ N., Long 112°08′47″ W.) to Lat. 36°01′30″ N., Long. 112°11′00″ W.; to Lat. 36°06′15″ N., Long. 112°12′50″ W.; to Lat. 36°14′40″ N., Long. 112°08′50″ W.; to Lat. 36°14′40″ N., Long. 111°57′30″ W.; to Lat. 36°12′30″ N., Long. 111°53′50″ W.; to the point of origin; but not including the airspace at and above 10,500 feet MSL within 1 mile of the eastern boundary between the southern boundary and Lat. 36°04′50″ N. or the airspace at and above 10,500 feet MSL within 2 miles of the northwest boundary. The area bounded by the Bright Angel and Shinumo Flight-Free Zones is designated the "Dragon Corridor."

(c) *Shinumo Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 36°04′00″ N., Long. 112°16′40″ W.; northwest along the park boundary to a point at Lat. 36°11′45″ N., Long. 112°32′15″ W.; to Lat. 36°21′15″ N., Long. 112°20′20″ W.; east along the park boundary to Lat. 36°21′15″ N., Long. 112°13′55″ W.; to Lat. 36°14′40″ N., Long. 112°11′25″ W.; to the point of origin. The area between the Thunder River/Toroweap and Shinumo Flight Free Zones is designated the "Fossil Canyon Corridor."

(d) *Toroweap/Thunder River Flight-Free Zone.* Within an area bounded by line beginning at Lat. 36°22′45″ N., Long. 112°20′35″ W.; thence northeast along the boundary of the Grand Canyon National Park to Lat. 36°15′00″ N., Long. 113°03′15″ W.; to Lat. 36°15′00″ N., Long. 113°07′10″ W.; to Lat. 36°10′30″ N., Long 113°07′10″ W.; thence east along the Colorado River to the confluence of Havasu Canyon (Lat. 36°18′40″ N., Long. 112°45′45″ W.;) including that area within a 1.5-nautical-mile radius of Toroweap Overlook (Lat. 36°12′45″ N., Long. 113°03′30″ W.); to the point of origin; but not including the following airspace designated as the "Tuckup Corridor": at or above 10,500 feet MSL within 2 nautical miles either side of a line extending between Lat. 36°22′55″ N., Long. 112°48′50″ W. and Lat. 36°17′10″ N. Long. 112°48′50″ W.; to the point of origin.

Section 5. *Minimum Flight Altitudes.* Except in an emergency or if otherwise necessary for safety of flight, or unless otherwise authorized by the Flight Standards District Office for a purpose listed in Section 3(b), no person may operate an aircraft in the Special Flight Rules Area at an altitude lower than the following:

(a) Eastern section from Lees Ferry to North Canyon: 5,000 feet MSL.

(5) Eastern section from North Canyon to Boundary Ridge: 6,000 feet MSL.

(c) Boundary Ridge to Supai (Yumtheska) Point: 7,500 feet MSL.

(d) Supai Point to Diamond Creek: 6,500 feet MSL.

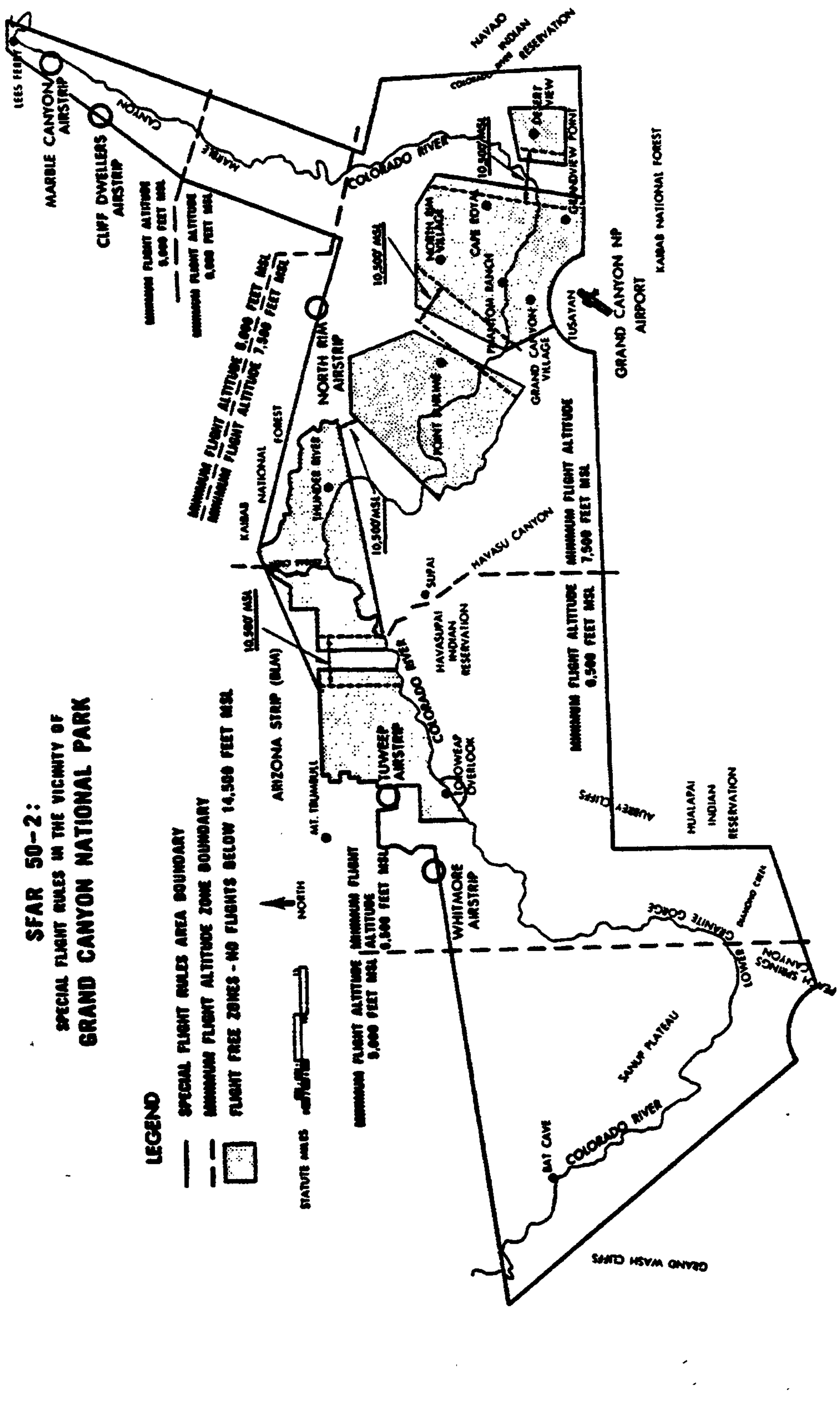
(e) Western section from Diamond Creek to the Grand Wash Cliffs: 5,000 feet MSL.

Section 6. *Commercial Sightseeing Flights.* [Removed]

Section 7. *Minimum Terrain Clearance.* [Removed]

Section 8. *Communications.* [Removed]

Section 9. *Termination Date.* [Section 1. *Applicability*, Section 4. *Flight-Free Zones*, and Section 5. *Minimum Flight Altitudes*, expire on 0901 UTC, January 31, 1998.]


SFAR 50-2:
SPECIAL FLIGHT RULES IN THE VICINITY OF
GRAND CANYON NATIONAL PARK
LEGEND
SPECIAL FLIGHT RULES AREA BOUNDARY
MINIMUM FLIGHT ALTITUDE ZONE BOUNDARY
FLIGHT FREE ZONES - NO FLIGHTS BELOW 14,500 FEET MSL
STATUTE MILES
NORTH
LEES FERRY
MARBLE CANYON AIRSTRIP
CLIFF DWELLERS AIRSTRIP
MARBLE
CANYON
MINIMUM FLIGHT ALTITUDE 8,000 FEET MSL
MINIMUM FLIGHT ALTITUDE 9,000 FEET MSL
MINIMUM FLIGHT ALTITUDE 8,000 FEET MSL
MINIMUM FLIGHT ALTITUDE 7,500 FEET MSL
KAIBAB
NATIONAL
FOREST
NORTH RIM AIRSTRIP
THUNDER RIVER
ARIZONA STRIP (BLM)
MT. TRUMBULL
10,500' MSL
TUWEEP AIRSTRIP
TOROWEAP OVERLOOK
WHITMORE AIRSTRIP
MINIMUM FLIGHT ALTITUDE 9,000 FEET MSL
MINIMUM FLIGHT ALTITUDE 8,500 FEET MSL
COLORADO RIVER
HAVASUPAI INDIAN RESERVATION
SUPAI
HAVASU CANYON
POINT SUBLIME
NORTH RIM VILLAGE
CAPE ROYAL
PHANTOM RANCH
GRAND CANYON VILLAGE
DESERT VIEW
GRANDVIEW POINT
TUSAYAN
GRAND CANYON NP AIRPORT
KAIBAB NATIONAL FOREST
NAVAJO INDIAN RESERVATION
MINIMUM FLIGHT ALTITUDE 8,500 FEET MSL
MINIMUM FLIGHT ALTITUDE 7,500 FEET MSL
AUBREY CLIFFS
HUALAPAI INDIAN RESERVATION
GRANITE GORGE
LOWER
PEACH SPRINGS CANYON
BAT CAVE
SANUP PLATEAU
GRAND WASH CLIFFS

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Special Federal Aviation Regulation 78

Special Flight Rules in the Vicinity of the Rocky Mountain National Park

Adopted: January 3, 1997 **Effective: February 7, 1997**

(Published in 62 FR 1192, January 8, 1997)
(Correction in 62 FR 7674, February 20, 1997)

SUMMARY: This action establishes a temporary Special Federal Aviation Regulation (SFAR) at Rocky Mountain National Park (RMNP) to preserve the natural enjoyment of visitors to RMNP by preventing any potential adverse noise impact from aircraft-based sightseeing overflights. This action temporarily bans commercial air tour operations over RMNP while the FAA develops a broader rule that will apply to RMNP as well as other units of the National Park system. The final rule will expire as soon as a general rule on such overflights is adopted.

FOR FURTHER INFORMATION CONTACT: Neil Saunders, Airspace and Rules Division (ATA–400), Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591; telephone (202) 267–8783. For the Final Environmental Assessment and Finding of No Significant Impact, contact Mr. William J. Marx, Manager, Environmental Programs Division (ATA–300), Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3075.

SUPPLEMENTARY INFORMATION:

Availability of the Final Rule

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Rulemaking (ARM–1), 800 Independence Avenue, SW, Washington, DC 20591, or by calling (202) 267–9677. Communications must identify SFAR No. 78 of this final rule as Docket 28577.

Background

The designation of an area as a National Park is one of the highest recognition given to any area in the country for its natural beauty and the importance of its protection. In view of the significance of this designation, Congress requires that National Parks by managed consistently with the "high public value and integrity of the National Park System and [such management] shall not be exercised in derogation of the values and purposes for which these areas have been established to conserve the scenery and the nature and the historic objects and the wildlife therein, and to leave them unimpaired for future generations." Organic Act, 16 U.S.C. § 1a–1; 16 U.S.C. 273–273d, 273f. The National Park Service ("NPS") and the Federal Aviation Administration ("FAA") recognize that noise from aircraft may interfere with the natural park experience for visitors on the ground and with efforts to preserve these and other park values.

On December 22, 1993, the Department of the Interior and the Department of Transportation joined to form an interagency working group ("IWG") with the objective of protecting National Parks from the adverse effects due to excessive aircraft noise. The IWG's tasks included reviewing the environmental and safety concerns caused by park overflights, and working towards resolution of impacts on specific parks.

The FAA's role in the IWG is to ensure the maintenance of aviation safety and provide for the safe and efficient use of airspace, while working with the Department of the Interior to achieve its role in the IWG to protect public land resources in the national park system, preserve environmental values for those areas, and provide for the public enjoyment of those areas.

On April 22, 1996, President Clinton issued a memorandum for Heads of Executive Departments and Agencies, in which he announced his Earth Day initiative, Parks for Tomorrow. Included in that initiative was the directive to the Secretary of Transportation, in consultation with other appropriate officials, to consider a rulemaking to address the potential adverse impact on Rocky Mountain National Park and its visitors of overflights by sightseeing aircraft. The President's announcement also directed that the value of natural quiet and the natural experience of the park be factors in any rulemaking action, along with protection of public health and safety.

FAA Statutory Authority

The FAA has broad authority and responsibility to regulate the operation of aircraft and the use of the navigable airspace and to establish safety standards for and regulate the certification of airmen, aircraft, and air carriers. 49 U.S.C. 40104, *et seq.*, 49 U.S.C. 40103(b). Subtitle VII of Title 49 U.S.C. provides guidance to the Administrator in carrying out this responsibility. However, the FAA's authority is not limited to regulation for aviation safety and efficiency.

The FAA has authority to manage the navigable airspace to protect persons and property on the ground. The Administrator is authorized to "prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes) for . . . . (B) protecting individuals and property on the ground" 49 USC 40103(b)(2). In addition, under 49 USC Section 44715(a) the Administrator of the FAA, in consultation with the Environmental Protection Agency, is directed to issue such regulations as the FAA may find necessary to control and abate aircraft noise and sonic boom to "relieve and protect the public health and welfare."

The FAA construes these provisions, taken together, to authorize the adoption of this regulation, which is intended to minimize the limit the adverse effects of aircraft noise to protect visitor enjoyment of RMNP. The FAA finds that the regulation of the navigable airspace, as authorized under 49 U.S.C. 40103(b)(2), is necessary, on a temporary, limited basis, as discussed below, to control and abate aircraft noise at RMNP under 49 U.S.C. 44715. Current policies support the exercise of FAA authority to protect the RMNP in these unique circumstances, at least as an interim step while the FAA proceeds to complete a rulemaking that will address the larger issue of protecting national parks. See generally, Section 101 of the National Environmental Policy Act of 1969, as amended 42 U.S.C. 4321 and Executive Order 11514, as amended by Executive Order 11991.

Rocky Mountain National Park

RMNP receives approximately three million visitors a year, making it the sixth most visited national park in the United States, despite its relatively small size (for a major Western national park) of 265,727 acres. RMNP is located approximately 40 miles outside the city limits of Denver, Colorado, and approximately 50 miles from the Denver International Airport. The topography of the park is characterized by steep mountains, narrow valleys, and high elevations (8,000 to 14,250 ft). Seventy percent of park terrain is above 10,000 feet. In fact, excluding Hawaii and Alaska, RMNP has the highest percentage of mountainous elevations above 10,000 feet, compared to any other national park.

RMNP presents pilots with a challenging flying environment. It has high winds, often in excess of 100 mph. The Park's high altitudes diminish engine performance and propeller efficiency, making it more difficult for an aircraft to perform in high winds. The rugged terrain limits maneuverability, and the rapidly changing weather can unexpectedly envelop an aircraft. Perhaps in part for these reasons, the use of the airspace over RMNP for commercial air tour operations has so far not been extensive. Unlike many other national parks, there are currently no air tour operators overflying the park or operating in the surrounding airspace. However, other aviation users do operate in the airspace above RMNP. Due to the Park's proximity to the Denver International Airport, aircraft operating to or from the airport overfly RMNP. Arrival and departure routes above the Park are necessary to ensure the safe and efficient handling of air traffic into the airport. Traffic into the airport operates at minimum altitudes of 19,000 feet above mean sea level (MSL) for jets and 16,000 feet above MSL for turboprop aircraft. Non-commercial general aviation aircraft also overfly the Park. While these non-commercial aircraft have not themselves created any noise problem, their presence establishes the feasibility of relatively low-level overflights within the park of operators of commercial sightseeing tours with comparable equipment.

The Park provides for automobile access within its boundaries from which there are numerous opportunities for viewing the park's vistas. Park officials estimate that 54 percent of the park can be seen from points along the 149 miles of roads.

Ninety-two percent of the park is proposed for inclusion in the National Wilderness Preservation System and is required by law to be managed by the National Park Service as a de facto wilderness until action is taken by Congress. This means that, among other things, most motorized vehicles must be contained within the existing roadway system, and future development is limited.

The Governor of Colorado, members of the Colorado Congressional delegation, and other officials have requested the Department of Transportation to place a preemptive ban on commercial air tour operations at RMNP. Even though there are no commercial air tour operations at the Park currently, some operators have expressed an interest in starting commercial air tours to officials of Estes Park, Colorado and to the NPS. The government officials who have requested regulatory action are concerned that an influx

of commercial air tour operations at RMNP would undermine the enjoyment of the Park by visitors on the ground.

The FAA wishes to be responsive to concerns about the effects of overflights on the national park system. Although the FAA is still developing nationwide standards for overflights of national parks, a relatively unusual set of circumstances has occurred at RMNP. Judging from the requests received by the FAA, there is broad support to protect the park environment by a ban on overflights among local leaders, even in the absence of current commercial air tour overflights. In addition, the FAA acknowledges the value in being able to take the initiative now, before any commercial overflights occur. At this point, there has been no environmental loss from commercial air tour overflights, and a temporary ban on such flights will cause no economic loss to any incumbent operator.

This temporary Special Federal Aviation Regulation will expire as soon as a general rule on overflights over the national park system is adopted. The FAA and DOI will be collecting quantitative data in conjunction with the development of this broader rule that will apply to all units of the National Park System.

Within 24 months of the effective date of this temporary ban, the FAA, in conjunction with the NPS, will complete a review of this temporary ban on commercial air tour operations over RMNP and publish its findings in the *Federal Register*. The FAA will determine whether the ban continues to be necessary to meet the objectives of the FAA and NPS. This review will consider any data collected during the development of the broader rule, as well as any other additional data that could be relevant to the temporary ban. The FAA also will consider any new issues relevant to RMNP that may have arisen, the effect of the temporary ban on the benefits of the park experience, including natural quiet, and any unanticipated burden the ban may have imposed on the air tour industry.

Discussion of Comments

A. Introduction

On May 15, 1996 (61 FR 24582), the FAA published an NPRM proposing several alternative methods of preserving the natural park experience of Rocky Mountain National Park by imposing restrictions on commercial aircraft-based sightseeing overflights. Commenters were invited to address three alternatives: (1) A total ban; (2) limits on operations, and (3) a voluntary agreement. As of September 1, 1996, the FAA received 4,527 comments from individuals, air tour operators from other geographic locations, environmental and civic organizations, state and local governments, and groups representing the interests of various segments of aviation. The overwhelming majority of these commenters favor Alternative One, a ban on overflights of RMNP, while a minority of commenters, virtually all representing aviation interests (e.g., National Air Transport Association (NATA), Airline Owners and Pilots Association (AOPA), and Helicopter Association International (HAI)) state opposition to any regulation of overflights at RMNP. Specifically, 4,479 or 98.94 percent of the commenters favor Alternative One; 14 or .30 percent favor Alternative Two; and 7 or .15 percent favor Alternative Three. Opposition to the NPRM and to any regulation of RMNP overflights is expressed by 27 or .60 percent of the commenters.

The vast majority of the comments that opposed sightseeing overflights are from private citizens who appear to have been informed about the NPRM by newsletters and other publications distributed by organizations such as the National Parks and Conservation Association (NPCA). In addition, the public was informed of this proposed action through public involvement activities at Rocky Mountain National Park.

A summary of the views presented by the commenters follows. First, the general issues raised by the commenters are discussed. Second, the three alternatives included in the NPRM are explained and commenters' arguments supporting and opposing each alternative are summarized.

B. General Issues Raised by Commenters

1. FAA Authority and Procedural Rules

Helicopter Association International (HAI) (comment 4357) states that this NPRM does not cite a statutory basis for the proposed action, but if the basis is 49 U.S.C. 44715, the FAA failed to consult the Environmental Protection Agency (EPA). HAI also states that the NPRM exceeds the mandate of Congress as stated in Public Law 100–91 to "provide for the substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight in the Grand Canyon National Park." The primary concern of HAI is that there is no Congressional mandate to restore the natural quiet in the RMNP. Additionally, HAI claims that the NPRM is not in compliance with the Administrative Procedure Act, in that the NPRM is not informative enough to allow a concerned party the opportunity to comment appropriately, is not promulgated on

the basis of safety, but on the unsubstantiated and subjective environmental impacts of future overflights, and is not in compliance with the FAA's own procedural requirements in Title 14 of the Code of Federal Regulations (14 CFR) part 11.65. HAI also cites the lack of an Environmental Impact Statement (EIS).

National Air Transport Association (NATA) (comment 4229) states that this NPRM allows federal land management agencies like the NPS to "effectively usurp FAA jurisdiction over air traffic and airspace itself" which is contrary to the Federal Aviation Act of 1958 that ". . . specifically charge[d] the FAA with assuring safety and fostering the development of air commerce." NATA and HAI state that this NPRM represents an undue threat to the public right of transit through the navigable airspace of the U.S. as provided for in Section 104 of the Federal Aviation Act. For the FAA to propose such a rulemaking would be to remove its authority to promote air commerce and safety, which would be "an incomprehensible dereliction of responsibility," in NATA's opinion.

The United States Air Tour Association (USATA) (comment 4563) states that the FAA fails to cite the statutory authority for the rulemaking, which it suggests is a tacit indication that the FAA does not have the requisite statutory authority to enact the rules put forth in the NPRM.

The Colorado Pilots Association, Inc. (comment 4429) states that the proposed ban would act as an unreasonable interference with interstate and intrastate commerce.

The National Association of State Aviation Officials (NASAO) (comment 4433) points out in a resolution issued at its Washington conference on March 10, 1996, that the proposed rule would give the NPS authority to direct the FAA in the use of the national airspace, which would be interfering with the FAA's mandate under Federal law.

Southwest Safaris (comment 4583) comments that the FAA does not have the regulatory power, as determined by Congress, to regulate that which does not exist. This commenter adds that the FAA was mandated by Congress to foster and promote the growth of commercial aviation, not to "regulate it out of existence" and that if the NPRM is implemented, commercial aviation would be discouraged instead of constructively regulated on behalf of the general public's interests.

The Northern California Airspace Users Worker Group (NCAUWG) (comment 4424), claims that the NPRM is inconsistent with the NPS Organic Act, unduly discriminatory against aviation, and would establish an undesirable precedent that could be used in other areas to affect negatively the safe and efficient use of airspace. This commenter states that the NPS was created by Congress to "promote and regulate the use of Federal areas known as national parks . . . [so as to] conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 U.S.C. 1). This commenter contends that regulating overflights over the RMNP does nothing to maintain the objectives listed above.

In contrasts, the Sierra Club/Grand Canyon Chapter (comment 2035) and the Citizens for Aircraft Noise Abatement/Sedona (CANA/S) (comment 4227) contend that natural quiet has been identified by the Park Service as a resource, citing the National Park Service Organic Act, as amended by the Redwoods Act of 1978, that defines resource preservation as the primary goal of the national parks. In addition, these commenters cite the Wilderness Act of 1964, which was enacted to protect the "primeval character" of designated lands and to provide "outstanding opportunities for solitude."

The Utah Air Travel Commission (comment 1113) oppose the NPRM because it questions the thoroughness and completeness of the scientific basis of the NPS's Report to Congress, in which aircraft noise alone was singled out as obtrusive, making this report both incomplete and biased. This commenter believes a new study is required, complete with the identification of all obtrusive noise source, before further regulation of park airspace is enacted. In addition, this operations of national parks may violate the Americans with Disabilities Act. This commenter is also concerned with the unconditional restriction imposed on aircraft due to noise, and asks if silent engines of the future will still be restricted.

The Utah Air Travel Commission also cites the conclusion of a study, Tour Passenger Survey Results, that the NPS considered biased because it was a survey of air tour passengers. The Commission believes that while the study may be incomplete, it does not recommend the elimination of park overflights; rather, it identifies the major value of overflights. This, in the commenter's opinion, indicates that no further regulation of overflights is warranted or needed.

2. Lack of Safety Justification of Any Rulemaking

The HAI (comment 4357) opposed the NPRM because there are no studies stating that the proposed rules will promote aviation safety or protect the environment and there has been no research conducted stating that health issues will be advanced.

The Montana Department of Transportation (comment 4349) asserts that aircraft overflights do not damage scenery, natural and historical objects or wildlife in the parks. Therefore, this commenter opposes this NPRM as it believes that "all categories of aviation are already by the use of navigable airspace for all respective flight activities at this time."

The Colorado Pilots Association, Inc. (comment 4429) states that the proposed ban is unnecessary because aerial tours do not operate over RMNP for obvious reasons: the high altitudes of the park; aircraft loading factors; and the attendant operating costs associated with running successful aerial tour operations. Thus, "it is inappropriate to restrict an activity that is unlikely to ever occur."

Geo-Seis (comment 4350), a part 135 certificate holder and provider of certain air tour operations in various parts of the U.S., oppose the NPRM, contending that "while no specific plans currently exist, [it] is an operator that is contemplating operations in the RMNP," especially given the close proximity of its offices to the Park and the type of helicopters this company operates. This commenter asserts that since it operates high altitude helicopters with an excellent safety record, it requests the FAA to reconsider prohibiting helicopter operations in the RMNP in the future.

3. National Standards/General Aviation

National Business Aircraft Association, Inc. (NBAA) (comment 1843), the Grand Canyon Air Tour Council (comment 2006), NATA (comment 4229), Aircraft Owners and Pilots Association (AOPA) (comment 4356), and the NCAUWG (comment 4424) are concerned about the potential for this proposed rule becoming the model for national overflight standards affecting all national parks. While the NBAA (comment 1843) has no vested interest in commercial sightseeing operators, it takes issue with a requirement to detour around the airspace of national parks while engaging in normal operations. NBAA is opposed to regulation prohibiting overflights by persons other than those engaged in for-hire sightseeing service because "there is no substantial evidence of significant noise impact on park area from normal (non-sightseeing) overflights by general aviation aircraft." Each of these commenters are wary of the implications of the NPRM based on the Grand Canyon National Park Rule, that is their opinion, are inherently discriminatory towards general aviation. AOPA (comment 4356) contends that due to the Grand Canyon National Park Rule, general aviation is required to fly higher altitudes than air tour operators, even though it constitutes very little transient traffic, as opposed to the thousands of overflights conducted by air tour operators. A similar point is made by NASAO (comment 4433). Several of the commenters point out that general aviation does not disturb the natural quiet of RMNP, and the current voluntary overflight altitude of 2,000 feet is one result of voluntary cooperation.

The Grand Canyon Air Tour Council (comment 2006) comments that the RMNP proposal is not separable from the FAA's and the Department of the Interior's project to develop national standards that will attempt to regulate all air traffic over all national parks and other possible federal land, and states that the broader issue "needs to be brought into the public domain for proper viewing." The council recommends a voluntary agreement until the debate on national standards for park overflights is available for national scrutiny.

AOPA (comment 4356) opposes any altitude restrictions for general aviation over RMNP. It asserts that general aviation does not disturb the natural quiet of the RMNP, and the current voluntary overflight altitude of 2,000 feet has served well to negate the potential impact of general aviation overflights.

4. Economic Considerations

Since there are no operators currently performing sightseeing air tour operations over RMNP, the FAA in the NPRM determined that the expected impact of this regulatory action is negligible and that this proposed amendment would not have a significant impact on a substantial number of small entities. Since operators may be considering starting these types of operations over the park in the future, the FAA asked for comment on whether any person intends to institute commercial sightseeing operations at RMNP.

HAI (comment 4357) disagrees with the rationale that there was no need to conduct a regulatory impact analysis because "there are no operators currently performing sightseeing air tour operators over RMNP, therefore the regulatory impact is negligible." HAI states that it is incumbent upon the FAA that an analysis of the future impact of this rule be conducted.

The Grand Canyon Air Tour Council (comment 2006) claims that the cost issue is not fully considered by the FAA. This commenter asserts that if the FAA can use a potential noise issue to justify its proposal it can use potential air tour operation in determining what is and what is not a cost on society. It recommends that the FAA: (1) Assess the monetary value of the RMNP's worth to society; (2) examine the potential revenue that could be appropriately generated through present and future business development (including air tours); and (3) develop a financial mode that would attempt to ascertain cost to society versus other values, e.g., the opportunity to see the seventy percent of the RMNP terrain that is above 10,000 feet.

The Grand Canyon Air Tour Council further asserts that it is very difficult to comprehend how the FAA concluded in the Regulatory Evaluation section that "this rule would not have a significant impact on a substantial number of small entities and would not constitute a barrier to international trade." The council states that the majority of air tour operators fall within the federal definition of a small business and that the majority of revenue produced by air tour operators are from foreign visitors.

5. Quiet Aircraft

McDonnell Douglas Helicopter Systems (MDHS) (comment 4552) states that the use of quiet aircraft technology would be more effective in reducing noise than would flight restrictions or the imposition of a ban. This commenter cites Congressional testimony and reports by the NPS and FAA/National Aeronautics and Space Administration (NASA) on the use of quiet aircraft technology and how it can be used as a noise reduction methodology. For example, in a 1994 report to Congress, the NPS recommended the use of quiet aircraft technology as a means to reduce the noise effect on National Parks.

C. Proposed Alternatives

The NPRM outlined three alternative methods of preserving the natural enjoyment at RMNP and requested specific comments on how such agreements could be handled. Alternative One would ban commercial aviation sightseeing tours in the vicinity of RMNP. Alternative Two would allow commercial sightseeing tours, but would restrict the operations to routes that would be restricted to minimum altitudes and would follow the existing road system, among other restrictions. Variations of this alternative were presented in the NPRM. Alternative Three would call for voluntary agreements between air tour operators and the NPS.

Since there were no air tour operators conducting overflights at the time the NPRM was proposed, the three proposed alternatives were an attempt to provide a fair representation of the possible ways to mitigate the predicted effect of aircraft noise generated by future air tour operators. Using the alternatives, which included suggestions ranging from the maintenance of the status quo through the use of voluntary agreements and restrictions on time, season, and altitudes, to a complete ban on all future air tour operations, the FAA made an informed decision. After considering the public policy favoring the preservation of the natural enjoyment of our National Parks, the strong demand from Colorado residents to ban commercial air tour overflights, the special situation and unique features of RMNP, and the numerous comments and alternatives, the FAA concluded that a ban on commercial air tour operations over RMNP will ultimately inure to the benefit of all. In effect, the ban will operate to preserve the status quo, because there are currently no commercial air tour operations at RMNP. The ban clearly protects the enjoyment of the park while avoiding the imposition of restrictions that would result in a less than meaningful opportunity for commercial air tours to operate over RMNP.

1. Alternative One—Ban Sightseeing Tours

a. *Support.* The majority of commenters (99 percent) support a ban on commercial aviation sightseeing tours. Most of these commenters are individuals who live near the park and/or have visited the park. Organizations that support a ban include: CANA/S, Sierra Club, NPCA, Wilderness Land Trust, League of Women Voters, Town of Estes Park, Estes Valley Improvement Association, Inc., Larimer County Board of County Commissioners, The Wilderness Society, and other local governmental and non-governmental organizations. Reasons that commenters give for supporting the ban include:

(i) *Preserve the Natural Enjoyment of the Park.* Commenters stress that the total ban would preserve the natural enjoyment and tranquillity of the park, which is what visitors value most in their national park experience. Some commenters cite statistics. e.g., 96 percent of park visitors value tranquillity, and 81 percent of park visitors are directly opposed to tour overflights. Some commenters point out that most of the park's visitors come from urban areas and are seeking the peace and quiet offered by the park. Others point out that the original purpose of national parks and wilderness areas was to provide this natural tranquillity and that overflights would destroy this objective.

Commenters assert that the allowance of overflights at other national parks (e.g., Grand Canyon National Park) has resulted in unacceptable noise levels which spoil the experience of park visitors. For example, commenter #2698 says that commercial sightseeing tours in Sedona, Arizona's Red Rock and Canyon regions continually violate FAA regulations which limit flight altitudes.

Roy Romer, the Governor of Colorado (comment 2156), supports Alternative One. He cites the counties, chambers of commerce, and hundreds of area citizens who have shown their unanimous support for a ban on helicopter tour overflights and who believe that helicopter tours of the park would be inconsistent with the long-term economic development goals and quality of life in their communities. Similarly, CANA/S (comment 4227) references two memos: One from Department of Agriculture, Secretary Dan Glickman, to Department of Transportation, Secretary Federico Peña (dated July 31, 1996); and the other from the Forest Service Chief Jack Ward Thomas to Secretary Glickman (dated April 11, 1996): "We believe that commercial helicopter flights over wildernesses are inconsistent with the values for which these areas were established by Congress."

Estes Valley Improvement Association (comment 155) claims that tour operations would shatter the silences in the RMNP "bowl of a valley." It is this commenter's belief that because the air is thin in this area, larger and stronger helicopter engines would be necessary. This would result in unendurable noise in the valley, thereby negatively impacting the ground tourism as well as the quality of life for the residents of the area.

The NPCA (comment 3634) states that, unlike commercial passenger jets and general aviation operations, commercial air tour operations are characterized by frequent, low-altitude flying to maximize contact with scenic points of interest. From the perspective of NPCA's members, this impacts on the park visitor's experience and the preservation of natural quiet.

(ii) *Safety.* Estes Valley Improvement Association (comment 155) cites the danger that tour operators would put themselves in by flying in an area known for extreme variations in weather, as sudden storms are common in the Great Divide and have been known to destroy airplanes. This, in turn, is a great source of danger for helicopters, people on the ground, and rescue operations.

Another commenter (comment 1335), based on his experience as a park ranger at the RMNP, states that bursts of wind would prove difficult for piston-engine aircraft to maintain altitude, air speed, and control when operating in the "rarefied air of these altitudes" of the RMNP. Also, he comments that the terrain of the park is more vertical than horizontal and is not safe for the operation of any aircraft and that a further danger would be for rescue personnel and victims of an incident. He cites the specific example of a recent airplane accident on Mount Epsilon, where the plane exploded from impact on the mountainside; when the airplane and pilot were found, there was no safe way to retrieve the pilot's body due to the potential of avalanches caused by the perilous plane position on the snow cornices on top of the cliff.

One commenter asserts that Alternative One would ensure the safety of park visitors (passengers on overflights and visitors on the ground) by preventing flying in a potentially unsafe mountainous area with varying elevations and unpredictable weather conditions (e.g., quick-forming thunderstorms, strong mountain wave winds and accompanying turbulence). One commenter (comment 540) also asserts that the crash of any aircraft could likely ignite a catastrophic forest fire.

(iii) *Wildlife.* From an ecological standpoint, commenters 295 and 1335 assert that increased air traffic can affect animals in many negative ways: adversely affecting breeding behaviors of birds and mammals, interrupting nesting habits, and causing stress to certain species. Animals indigenous to these areas are apt to respond to this noise stress by either migrating from the area or simply dying off, unable to handle the stress to their natural habitat. In addition, there may be an increased danger from rock falls and avalanches. To this commenter, the most important issue is that the RMNP should serve as a tranquil refuge to the wildlife. Posing a similar ecological concern, a park ranger (comment 1335) mentions the greater pollution problem when dealing with airplane crashes, scattering fuel loads and airplane parts throughout the fragile tundra ecosystems, which require years to recover from such accidents.

A complete ban would prevent potential negative impacts on wildlife. Some commenters state that RMNP is one of the last refuges for many species, and that overflights would devalue their natural habitat and safety. This, in turn, would impact visitors' experience of the park because many of them value wildlife sightings. It would also be consistent with the national policy of providing protection for national park lands.

(iv) *Access for Disabled.* To counter the claim that prohibiting the flight of helicopters would disadvantage the elderly or disabled from enjoying the park, the Estes Park Accommodations Association (comment 257) states that there are areas for cars to travel as well as tour vans to accommodate them. The

Wilderness Land Trust (comment 2027) similarly assert that there are opportunities to partake of the scenic vistas, making aviation sightseeing unnecessary.

Visitors who cannot or choose not to see the park on foot can already get a good view of the park and look down on the mountains by driving on one of the park's several roads (e.g., Trail Ridge Road) or by using the handicap accessible trails. Thus, overflights are unnecessary.

(v) *Cost.* CANA/S (comment 4227) states that the benefit (natural quiet for the vast majority of visitors and residents who value this resource) of Alternative One justifies its costs (a disappointed prospective air tour operator of some unknown time in the future). The same analysis applies to the option of maintaining the status quo (avoiding any additional expenses now), which according to this commenter does not "justify its costs (uncertainty about the advent of RMNP air tours, as well as the failure of FAA to address problems in their early or pre-existent stages, not to mention even higher expenses to solve problems retroactively.)" The benefits of Alternatives Two and Three (economic transactions between the few and the fewer) do not justify their costs (shattered natural quiet for most individuals, and enormous governmental expenses for dealing with the problems).

(vi) *Other.* The Wilderness Society (comment 4457) states that, as has occurred at other national parks, correction of overflight problems will be virtually impossible once commercial flights have become established. Thus, FAA action is necessary to preclude the establishment of commercial air tour operations within RMNP and provide the highest degree of protection for the park's resources and visitors.

The Sierra Club, Grand Canyon Chapter (comment 2035) strongly supports Alternative One and adds the following recommendations: the rule should be implemented permanently; four bordering Congressionally designated wilderness areas should also be covered under this no-air-tour-flight rule, specifically, Comanche Peak, Indian Peak, Neota, and the Neversummer Wildernesses; general aviation should be subjected to the same rule as air tour operators, except that low altitude flights may be required for emergency purposes like search and rescue, fire-fighting, etc.; and the rule should apply to airspace adjacent to the protected areas as well.

b. *Oppose.* (i) Air Transportation—Least Damaging. Commenters such as the HAI (comment 4357) and Geo-Seis (comment 4350) claim that helicopters and other air tours are the most environmentally sound means to enjoy RMNP because, unlike those visitors on foot, the air tour visitors do not trample vegetation, disturb artifacts or leave behind any refuse. In addition, air tours do not require roads or other infrastructure development. More importantly, they provide a service to the handicapped and elderly, who would not otherwise be able to visit the park. Finally, these tours may fulfill the need to provide rescue and emergency airlift.

NATA (comment 4229) and HAI (comment 4357) state that these proposals are discriminatory in nature as no other modes of access to the Park have been proposed to be limited. NATA states that ground traffic "extol a much more tangible price on the natural beauty of the Park" while air tours "leave no residual effects within the Park that affect the enjoyment of the Park by persons on the ground."

(ii) *Temporary Ban While Studying.* NATA (comment 4229) notes that the idea behind the prohibition of all flights is to allow the FAA and NPS the opportunity to "study the situation and to develop a plan for controlling these overflights to minimize or eliminate their effect on park visitors on the ground." This commenter thinks that this alternative is counter-intuitive to this stated objective, as no data would be able to be collected if no flights were permitted to take place in the RMNP. In order to accurately determine the effect of air tours within the Park, air tours must be allowed within the Park, as extrapolating or estimating the data from other sources would be inaccurate due to the unique characteristics of all parks. In conclusion, NATA believes that the fact no sightseeing operators provide service to the Park is irrelevant and future opportunities to provide access to the Park are eliminated unfairly.

(iii) *Air Tour Operators comparable to General Aviation Aircraft.* The USATA (comment 4563) points out that, according to the NPRM, commercial aircraft currently overfly the park on a daily basis at 19,000 and 16,000 feet above mean sea level (MSL). USATA says that these altitudes are less than 2,000 feet above the highest peaks and also adds that, since seventy percent of the park terrain at RMNP is 10,000 feet MSL, most of the general aviation aircraft currently flying through RMNP are following routes where the Park's peaks rise above these aircraft. USATA states that with numerous aircraft moving in, around and above RMNP, NPS officials, in discussions with the FAA, have found that these aircraft have not caused any serious noise problem. USATA believes that air tour aircraft are akin to general aviation aircraft and commercial overflights, and if used properly, would present negligible effects.

(iv) *Other.* Temsco Helicopters (comment 4575), an operator that conducts air tours in Alaska, says that prohibiting air tours would be discriminatory to air tour operators. This commenter also says that alternative one would create interpretation problems. For example, "are flights that are point to point but fly through RMNP air tours? Is a photo flight an air tour?"

2. Alternative Two—Permit Sightseeing tours with Limitations

a. *Support.* Geo-Seis (comment 4350) would support some time-specific restrictions under this option and suggests that the times be modified to parallel optimum flight conditions, which are primarily earlier in the mornings to mid-afternoon.

b. Oppose. (i) Enforcement. The Estes Valley Improvement Association (comment 155) claims that limiting operations is completely unsatisfactory primarily because of the inability of any agency to monitor this regulation. This commenter and others believe that the proposed requirement of flying 2,000 feet above ground-level is not practical or enforceable since the ground-level varies so drastically from 7,500 to 14,255 feet.

CANA/S (comment 4227) claims that the FAA's 2,000-foot above-ground-level guideline for flights over noise-sensitive areas is routinely ignored by air tour operators. In addition, HAI's flight guidelines are also often ignored.

An individual commenter (comment 325) says that a 2,000 ft. above ground level restriction is meaningless because "[o]ver much of the park's terrain hikers could throw rocks down on the occupants of a plane complying with the restriction." Also, seasonal restrictions are meaningless because the park is used year-round by skiers and others.

(ii) Noise Issue. Estes Valley Improvement Association (comment 155) states that since noise from aircraft reverberates all over the valley, this option to keep flying only over roads would not solve the reduction in noise issue, as this area is where the highest percentage of residents, visitors and lower groups of animals would be affected.

Similarly, CANA/S (comment 4227) adds, noise from aircraft flying at 2,100 feet above ground is, for all intents and purposes, indistinguishable from that at 2,000 feet. Therefore, this alternative and the voluntary agreement fail to address many aspects of the natural quiet equation. This commenter adds, according to NPS's 1992 *Aircraft Overflight Study: Effect of Aircraft Altitude upon Sound Levels at the Ground,* any doubling of flight altitude (say from 2,000 feet to 4,000 feet) would, based on divergence alone, result in only a 12 decibel reduction (NPS, page 3). This commenter contends that this may be helpful in the instance of already quiet aircraft, but loud aircraft would still shatter the quiet.

The Wilderness Society (comment 4457) states that the restrictions of Alternative Two would not eliminate the degradation of visitors' experiences. Routing flights over road corridors would mean that more visitors would be affected by the noise, and routing flights over backcountry areas would affect the highest quality wilderness and wildlife habitat. In addition, restrictions on elevation above ground level would not eliminate the noise problem, and would result in as a de facto ban at those altitudes where noise levels were reduced to an acceptable level because the distance from the ground to the aircraft would be too great to afford a decent view. Finally, it would also be extremely difficult to enforce an altitude restriction.

(iii) Lack of Data. Taking a different approach to this alternative, NATA (comment 4229) perceives that the variants presented by this alternative offer nothing more than varying forms of restrictions. This commenter assumes that the basis for this action is to enhance the environment of the Park by visitors on the ground by limiting air tour operations during these periods. However, NATA asserts, no quantifiable data exists as to how limiting air access to the Park will enhance the experience of visitors on the ground. According to a survey of Park users conducted by the NPS, about 90 percent of the visitors to the Park stated that their enjoyment of the Park would be affected by helicopter noise. This commenter states that using this data to limit all overflight operations is ludicrous, and "the FAA cannot apply theoretical data to a nonexisting situation."

HAI (comment 4357) believes that this NPRM does not provide sufficient information for meaningful comment. For instance, no information on what routes are considered in Alternative Two was included and there are no maps or charts provided for an analysis of proposed routes. This lack of information makes it impossible to comment in detail.

(iv) Other. NPCA (comment 3634) states that, in a park environment that is totally free of commercial air tour activity, placing limitations on operations would invite the establishment of such activity. NPCA

adds that any limit, less restrictive than a total and permanent ban, would result in the derogation of park values rather than any improvement of current conditions.

Temsco Helicopters (comment 4575), which supports alternative three, states that time and seasonal restrictions of alternative two would make any kind of air tour operation unworkable. For example, seasonal restrictions would make operations economically unfeasible and would close the park to one type or class of visitor for a portion of the year.

USATA (comment 4563) disapproves of imposing limits on the routes used by air tour aircraft and points out that the ability of these aircraft to operate away from populated areas is a positive factor. USATA states that air tours would cause the least amount of environmental damage to wilderness areas and would therefore be supporting the mission of the Wilderness Act to preserve the "primeval character and influence" of these areas.

USATA goes on to point out its difficulties with Variants A, B, and C. USATA says that the 2,000 feet AGL limitation of Variant A would be in effect a "one-size-fits-all" approach would could exacerbate the presence of sound from aircraft; this was the case in Haleakala National Park which was required to meet a 1,500 foot AGL minimum by SFAR 71. USATA also states that the time limitations of Variant B would be unreasonable because it would be impossible to present many of the wonders of the park in the absence of flight. Finally, USATA says that the seasonal limitations of Variant C would threaten the viability of air tour operations seeking to operate in RMNP because many of these companies would need to operate year round in order to stay in business.

3. Alternative 3—Voluntary Agreement

a. *Support.* The Grand Canyon Air Tour Council (comment 2006) contends that this is the only viable option. This commenter believes that a voluntary agreement is necessary, because such an agreement provides a solution "where no authority exists for effecting regulatory options (as in the case of this RMNP NPRM)." This commenter provides reasons why the other two alternatives are not acceptable: the disregard to the interests of the elderly and handicapped to have air tour availability in the RMNP, the lack of an Environmental Impact Statement prior to the implementation of the proposed SFAR, and the fact that this proposal is based on a request by Colorado's Governor, the Congressional delegation, and other officials from Colorado specifically, none of whom are the owners of this national park and do not represent a federal statutory authority nor a legislative mandate. Therefore, in this commenter's opinion, it "would appear incumbent upon the FAA to decide to proceed only with Alternative Three and request the involvement of potential tour operators in the establishment of a voluntary agreement to prohibit or limit operations."

Temsco Helicopters (comment 4575) points out that there are good examples of existing voluntary agreements that are working well. For example, in Alaska, where this commenter operates, the best routes and altitudes have been refined over the years and have resulted in the least impact and very few complaints. This commenter states that an SFAR would not allow for the kind of refinements and positive results that such agreements have fostered.

Geo-Seis (comment 4350), an air tour operator, believes that given the personal preferences of paying customers on these flights and limitations on flights due to adverse weather conditions, voluntary and satisfactory operating agreements could easily be established with most operators.

AOPA (comment 4356) believes "cooperation between general aviation pilots and the NPS has always been a cornerstone of aviation's efforts to preserve the park experience of ground visitors. The current voluntary overflight altitude of 2,000 feet is one result of this cooperation."

USATA (comment 4563) supports the use of voluntary agreements and says that its organization would work with the FAA, NPS, and others in drafting a letter of agreement. The agreement should address these issues: (1) areas that would be covered, (2) possible restrictions and identities of the participants, (3) discussion on how an agreement would be implemented in the necessary time frame, (4) how an altitude restriction would be enforced, (5) suggested penalties for violations, and (6) the circumstances under which an agreement could be terminated.

b. *Oppose.* Many commenters say that voluntary compliance is unrealistic because operators would not voluntarily limit their own profits and because it would be difficult to enforce. For example, commenter #325 says that the park is sufficiently large to be a challenge to monitoring of compliance.

The Estes Valley Improvement Association (comment 155) believes that this proposal is completely unrealistic since, currently, operators do not exist in the RMNP, and no possible route of overflights could make tolerable the noise which would fill the Valley and the Park.

NPCA (comment 3634) states that voluntary agreements have a history of failure and cites the experience at Hawaii Volcanoes National Park where many operators, after having given verbal agreements to park management, backed away from written agreements for fear that a rogue operator would capitalize on non-compliance and seize market share. Similarly, the Wilderness Society (comment 4457) states that voluntary agreements have not successfully protected park resources and that violations occur for which the Park Service has no recourse.

On the NPRM's use of the Statue of Liberty and Jefferson National Expansion Memorial as examples of successful voluntary flight agreements, CANA/S (comment 4227) refutes the ability of the FAA to use them as examples. These locales are site-specific, urban ones, where "natural quiet" did not already exist to any appreciable degree, particularly with the 500-foot above ground level altitude agreements in effect. These locales are in no way comparable to those of much more vast territory, much of it wilderness, and much of it relatively quiet. The sightseeing objective of those two examples is to swoop around a single entity. Similarly, NATA (comment 4229) claims that while these self-regulated, self-policing cases have been successful for those specific parks, no air tour operators currently provide service to the RMNP, and no agreements can be made between the government and "air tour operators which may exist in the future."

Response to Comments

As will be described in greater detail below, the comments offered many cogent and informative remarks for consideration by the FAA. The number and quality of the comments received demonstrated to the FAA the importance and complexity of this issue as it relates to RMNP. All comments were thoroughly read and analyzed.

Many of the commenters offered similar arguments for either acceptance or rejection of the various alternatives presented in the NPRM. Due to the vast number of the comments, the section below is a summary of the assertions alleged in the comments and the corresponding response by the FAA.

FAA Authority to Manage the Airspace

Several commenters questioned what they considered was the apparent usurpation by the NPS of the FAA's statutory authority and jurisdiction to regulate the national airspace system. They asserted that the NPS, through this rule, had gained control over the navigable airspace in complete disregard to the FAA's statutory mandate. The regulation of navigable airspace is the sole responsibility of the FAA. The United States Congress has clarified this issue by vesting the FAA with sole authority for the management and control of the navigable airspace. In addition, safety remains the FAA's primary consideration and plays a necessary and integral role in any decision made by the agency.

The allegation that the NPS has assumed jurisdiction for the management of the national airspace is unfounded. The FAA and NPS worked closely together, however, to base any regulatory action on FAA's statutory authority and responsibility. Toward this end, for example, no action was even proposed until the FAA made a determination that there would be no adverse effect on aviation safety in navigable airspace from any of the proposals stated in the NPRM.

Several commenters argued that the FAA lacked the authority to regulate a problem that "does not exist." These commenters argue that it is premature for the FAA to regulate this area, where commercial air tours do not presently operate over RMNP. The Administrator of the FAA is charged with the duty of regulating the use of the navigable airspace, adopting regulations deemed necessary to abate aircraft noise, and protecting persons and property on the ground. The Administrator has the authority to regulate whenever previous history or evidence has revealed a propensity for future problems.

The FAA acknowledges that each of the national parks differ in their topography, nature, size and purpose, but certain experiences found in one park also occur in other parks. Experience with commercial air tour operations in Badlands National Park, Bryce Canyon National Park, Glacier National Park, Glacier Bay National Park, Great Smokey Mountains National Park, Grand Canyon National Park and Mt. Rushmore National Memorial have demonstrated the rise in the number of commercial air tour operations conducted over the parks and a concomitant increase in the noise from such operations.

For example, at Glacier National Park, The NPS estimates that from 1986–1996 the number of fixed wing and helicopter tours at the park increased from 100 to 800 and the number of tour operators from one to five. At Badlands National Park, NPS estimates that the single air tour operator offering helicopter tours conducted over 400 flights in a five month period, or an average of three flights per hour during peak periods. These flights are repetitive in nature concentrated in two basic circular flight patterns over the same area again and again, constantly disturbing the quiet of the park. The air tour operations have led to numerous complaints by visitors to the park.

Bryce Canyon has air tour operations from several locations within the vicinity of the park. At Bryce Canyon Airport, located 3.5 miles north of the park, NPS reports that the number of enplanements has increased dramatically from 1299 in 1991 to approximately 4700 per year in the current year. Likewise, the number of air tour operators, from all locations, has increased from one to five. At the Mt. Rushmore National Memorial, the Park Service estimates that the number of overflights has increased from 2400 per year to 4000 per year along with an increase of tour operators from one to four. All of the tour operators use helicopters and the majority of these flights are concentrated in the summer months at the rate of approximately 30 per day.

In addition, the Park Service has conducted a survey of park users at RMNP, which indicated that ninety-three percent of visitors considered tranquility to be an "extremely" or "very" important value in the park. Approximately ninety percent of the visitors surveyed stated that noise from helicopter tours would affect their enjoyment of the park. A copy of the survey has been placed in the docket of this proceeding.

Based upon this information from RMNP visitors, the growth of tour operations at these other parks, and the apparent representations of potential tour operators, the FAA has concluded that the introduction of air tour operations at RMNP is a real possibility in the absence of regulation. Further, if commercial air tours are established at RMNP, the actions by commercial air tour operators at the other parks suggests that the number of commercial air tour operators and the number of daily over flights would both increase beyond *de minimus* levels. Air tour operations would tend to visit many of the points of interest where ground-based visitors are likely to concentrate and to conduct operations at altitudes so as to maximize contact with these points of interest. The increase in operations and their proximity to major points of interest would lead to increased noise levels thereby impacting the quiet enjoyment of RMNP expected and desired by visitors to the park.

While the FAA has determined that a permanent rule regarding oversights of Rocky Mountain National Park by commercial tour operators should be made part of the overall rulemaking on overfights of all national park units, the FAA is taking this temporary action now to avert the introduction of such operators into RMNP while the national rule is completed. The experience gained from other national parks forms part of the basis for the Administrator's decision to move at this time to protect Rocky Mountain National Park.

Administrative Procedure Act

One commenter alleged that the FAA has failed to comply with the Administrative Procedure Act's notice and opportunity for comment requirements by failing to provide sufficient information to allow a meaningful response to Alternative Two. As an example, the commenter suggests that, under Alternative Two, the absence of maps and charts deprives the commenter of a meaningful opportunity to analyze the proposed routes.

Section 553(b) of the Administrative Procedure Act provides that "notice shall include—(3) either the terms of substance of the proposed rule or a description of the subjects and issues involved." Under the alternatives section, the FAA solicited comments on numerous proposals, while requesting new ideas on possible restrictions. The Agency received many comments on the proposed alternatives, but no new alternative that had not already been proposed. (Had the FAA received a new, significantly different, proposal on which it relied, the FAA would have issued a Supplemental NPRM to solicit comments on the new proposal prior to taking action.) The number and specificity of the received comments demonstrate a general understanding of the proposed alternatives. Therefore, the FAA concludes that it has provided sufficient detailed information concerning the description of the subjects and issues involved to comply with the terms of the Administrative Procedure Act by affording interested parties with a meaningful opportunity to comment on the proposal.

"Natural Quiet" Standard

One commenter challenged the action of the FAA as proposed in the NPRM by alleging that the actions of the FAA exceeded the Congressional mandate provided under Public Law 100–91 to substantially restore the natural quiet of the Park, because that standard was devised solely for the protection of the Grand Canyon. The commenter further opined that the attempt to achieve "natural quiet" in RMNP was inappropriate and without any Congressional mandate.

It is true that Public Law 100–91 was directed to restoring the "natural quiet" of Grand Canyon National Park only and not to the other parks in the national system. Public Law 100–91 provides for the substantial restoration of the natural quiet and experience of the Grand Canyon National Park and protection of public health and safety from adverse affects associated with aircraft overflights. The FAA is taking separate action on restoring the quiet of Grand Canyon National Park.

In this final rule, however, the FAA is carrying out President Clinton's directive to promote natural quiet at Rocky Mountain National Park. As noted above, the President's *Parks for Tomorrow* initiative specified that the restoration of natural quiet, and the natural enjoyment of RMNP are goals to be addressed by this rulemaking. By promulgating this final rule, the FAA is cooperating with the NPS to further the goal of protecting Rocky Mountain National Park, its environment, and visitors' enjoyment, to ensure that the potential problems associated with noise from commercial air tour operations do not arise while a long-term solution is developed to protect RMNP and other national park units from the adverse effects of overflights by tour operators.

Another commenter asserted that NPS's report to Congress, while espousing the restoration of natural quiet, singled out only noise as being obtrusive. The commenter alleged that this made the report incomplete and biased.

The NPS's report to Congress: *Report on Effects of Aircraft Overflights on the National Park System* responded to the Congressional mandate set forth in Public Law 100–91. The scope of the mandate was limited to the impacts of aircraft overflight on the national park system with distinctions to be made among various categories of aircraft overflights. The law made no provision to identify or compare any impacts on the national park system from other activities or sources. To the extent that other activities, such as ground transportation, may have an adverse effect on parks' environment or visitor experience, these effects can be dealt with by the NPS under its authority.

NEPA Requirements

Some commenters maintain that the FAA should prepare an environmental impact statement (EIS) pursuant to the National Environmental Policy Act of 1969, prior to issuing the final rule because they contend that implementation of any of the alternatives of the proposed SFAR, except the ban alternative (Alternative 1), will have a significant adverse affect on the quality of the human environment.

According to the FAA's Environmental Order 1050.1D, the final rule is a Federal action which requires compliance with the NEPA. Consistent with the FAA Order 1050.1D, Para. 35, the FAA prepared a draft environmental assessment (DEA). The DEA did not disclose potentially significant direct or indirect impacts affecting the quality of the human environment. On November 21, 1996, the FAA announced the availability of the DEA for notice and comment. The comment period on the DEA remained open until December 23, 1996. Based on the comments received on the DEA and further analysis, the FAA has issued a Final EA. The FAA has determined that no additional environmental analysis is required and has issued a finding of no significant impact (FONSI). The final EA and FONSI has been issued and is available for review in the Docket. For copies of the documents, contact the person listed in the "FOR FURTHER INFORMATION CONTACT" section listed above.

This final rule constitutes final agency action under 49 U.S.C. 46110. Any party to this proceeding having a substantial interest may appeal the order to the courts of appeals of the United States or the United States Court of Appeals for the District of Columbia upon petition, filed within 60 days after entry of this Order.

EPA Consultation

One commenter states that the NPRM does not cite a statutory basis for the proposed action, but if the basis is 40 U.S.C. 44715, the FAA failed to consult the EPA.

The FAA is, in fact, relying on 40 U.S.C. 44715 and has consulted with EPA. The EPA believes that the environmental assessment adequately supports a finding of no significant impact.

Airline Deregulation Act

Another commenter believes that by promulgating the NPRM, the FAA has violated Section 102 of the Airline Deregulation Act of 1978 by failing to: (1) Encourage the entry of new carriers into air transportation, (2) foster the expansion of existing carriers into additional air transportation markets, and (3) insure the existence of a competitive airline industry. The commenter cites the possibility that interstate operators might become interested in commercial air tours in the future.

The statutory obligation to encourage development and competition among air carriers is not unconstrained. The FAA has authority to regulate, restriet, or prohibit activities by operators when necessary in the public interest. The final rule effects a temporary ban on commercial air tour operations over the Rocky Mountain National Park; the FAA has determined such a ban is necessary to allow for the orderly development of a comprehensive approach to regulating air tour operations at RMNP and other parks in a manner that is consistent with the needs of park visitors on the ground. The potential that an interstate operator will become interested in commercial air tour operations at RMNP at some unspecified

point, let alone during this interim period, is pure speculation, irrespective of the informal remarks of the commenters, and fails to rise to the level of a protectable interest. Moreover, it is important to recognize that a major reason the final rule has been promulgated, prior to the existence of commercial air tours, is to avoid the unnecessary interruption of established commercial service by whatever regulation is adopted in the broader national rulemaking now underway on park overflights.

This rulemaking arose in response to public demand. The policy for preserving the natural enjoyment at our national parks has been formulated by the FAA to facilitate the adaptation of the air transportation system to the present and future needs and interests of the public. Any potential air tour operator currently evaluating whether to provide air tour operations within Rocky Mountain National Park will be able to participate in the development of the rulemaking on national park overflights at all parks, including RMNP.

Americans With Disabilities Act

Several comments were received alleging that the final rule will violate the Americans With Disabilities Act, § 2(a)(8) by depriving disabled persons of equal opportunity for full participation in the enjoyment of the Rocky Mountain National Park. According to these comments, commercial air tour operations will be the only way disabled individuals can enjoy the vistas of RMNP.

To the contrary, Rocky Mountain National Park offers an unique opportunity for disabled individuals to enjoy its spectacular vistas via its extensive road system. Approximately 54% of the RMNP can be viewed from some point along its 149 miles of winding road. In this aspect, RMNP is unique in its ability to provide access to recreational experiences via trails which allow access to backcountry and scenic vistas. Moreover, the NPS has established facilities and programs within RMNP to enhance the opportunities for visitors with disabilities to experience the Park. Thus, FAA believes that this rule does not violate the ADA.

Economic Costs

One commenter suggested that the FAA should conduct a cost/benefit analysis to determine whether the costs of implementing the NPRM will exceed its ultimate value to society. The imposition of this ban will not have an economic impact on commercial air tour operations over RMNP today because they are non-existent. Nor does the FAA consider it probable that significant levels of new services will arise during the temporary period between adoption of this rule and completion of the more comprehensive rulemaking on national park overflights. The FAA's intent is specifically to avert economic damage to commercial air tour operators by acting prior to one of more operators commencing business on the assumption that they will be allowed to operate over RMNP once the general rule is adopted. By acting expeditiously, the FAA will enable these operators to avoid making the capital investments necessary to engage in these operations that may be subject to future restrictions as part of the national rule.

However, it would be an error to minimize the true impetus for the final rule which is to preserve the natural resources at RMNP, including the quiet and solitude. In this respect, it is difficult to assign a monetary value to the benefit to be gained by this rule. Specifically with respect to the economic value attached to the preservation of environmental values, some economic analysis models (such as use of a "willingness to pay" analysis) could ascertain an economic value to society of such an asset. However, such analysis is not necessarily directly comparable in a cost/benefit basis with the economic valuations of costs and benefits that the FAA undertakes for other rulemakings. As a result, the information provided through such an effort would have little analytical or probative value.

National Standards/General Aviation

Many of the commenters that expressed opposition to this rule stated that it is premature for the FAA to take action concerning one park within the national park system when it is currently drafting a rule to cover all aviation operations within the total national park system. The commenters felt that parks should not be dealt with on a case-by-case basis, but should be incorporated into any national standards that are promulgated.

To some extent, the FAA agrees with these concerns. For that reason, this rule will terminate when national standards are adopted. However, in view of the strong local demand for action to ensure preservation of Rocky Mountain National Park and the ripeness of this proceeding, the FAA is taking the opportunity to establish temporary protective measures at RMNP while the national standards are being adopted. By Presidential Declaration dated April 22, 1996, the President directed the Secretary of Transportation to consider and draft a Notice of Proposed Rulemaking that would propose national standards for air tour overflights of the national parks. The FAA is working on that national rule currently and will follow rulemaking procedures, including proceeding with notice and opportunity for comment, prior to

taking any final action. The FAA has designed its Rocky Mountain National Park rule to terminate on the adoption of national standards.

Certain commenters raised an objection that even though the air tour ban would apply to only commercial air tour operators, the rule proposed still represents an undue threat to the public right, including that of general aviation aircraft, to transit the navigable airspace of the United States. This final rule is strictly limited to overflights by commercial air tour operators over RMNP. Air tour operations differ from general aviation operations in the frequency of trips and their operational altitudes. In addition, air tours generally operate over picturesque areas where ground traffic congregates and at altitudes intended to maximize contact with these areas. Therefore, air tour operations are distinguishable from general aviation operations to such a degree as to remove any perceived threat to the right of general aviation aircraft to transit RMNP. Under the provisions of the final rule, all other aircraft will remain undisturbed in their current routes and altitudes of flight.

Quiet Technology

Another commenter recommends that rather than banning commercial air tours over the RMNP, the FAA should follow the recommendations of a 1994 report to Congress where the NPS suggested the use of quiet aircraft technology as a means of reducing the noise effect on National Parks. The NPS report to Congress suggested that quieter aircraft could be used in substantial restoration of natural quiet in Grand Canyon National Park (GCNP). It identified Dtt C–6–300, Vistaliner and Cessna 208 Caravan airplanes, and the McDonnell Douglas "No Tail Rotor" helicopters as the quietest aircraft currently operating in GCNP. The NPS made this determination based on its evaluation of aircraft certification data derived from applicable noise certification standards in Part 36 of Title 14 of the CFR, and from NPS flyover noise measurements taken in the park. Because of the temporary nature of this rule, the FAA determined that quiet technology would not provide an adequate alternative. Quiet technology ultimately holds great promise for ensuring the compatibility of air tour overflights and the maintenance of quiet for ground-based visitors of national parks. Indeed, movement toward the use of quiet technology forms a cornerstone of the FAA's proposal for a long-term solution to overflights of the Grand Canyon. And the FAA will want to explore the role quiet technology should play in the national rule. However, for this interim period, a temporary ban on commercial air tour operations will maintain the status quo and allow an orderly resolution of questions pertaining to quiet technology and other issues. To the extent that technological change would allow the operation of commercial air tours within RMNP in a manner consistent with the protection of the Park, its resources, and its enjoyment by visitors, the FAA will review this rule in the future.

The Lack of Air Tour Operators

Certain commenters questioned whether this rule was even necessary, because aerial tours do not operate over RMNP for obvious reasons: the high altitudes of the park; aircraft loading factors; and the attendant operating costs associated with running successful aerial tour operations. The FAA, in cooperation with the NPS, is currently developing regulations to govern aircraft overflight of national parks. Since the inception of that effort, interest has been expressed by an operator to commence commercial air tour service at RMNP. As a practical matter, it was the fact that a commercial air tour operator was contemplating engaging in flights over RMNP that caused the Governor of Colorado, members of the Colorado Congressional delegation, and Estes Park, Colorado officials to request the FAA to preemptively ban such operations at RMNP.

The fact that commercial air tour service is being contemplated for RMNP supported the FAA determination that immediate action was necessary to preserve the natural enjoyment of visitors to RMNP by implementing a *temporary* ban on commercial air tour operations. In addition, the FAA believes it is critical to act expeditiously on this matter to avoid any potential environmental and economic impact.

Alternatives

As previously mentioned, the FAA is attempting to implement a regulation over RMNP that achieves the goal of preserving the natural enjoyment of the Park by visitors by averting the future and potential adverse effects of aircraft noise. The comments received on the alternatives were crucial in the FAA's decision. Based on the comments, the FAA determined that Alternatives 2 and 3 would not achieve the desired goal. Therefore, the FAA has determined that the best alternative in application and result would be Alternative One on a temporary basis.

In response to the voluntary agreement alternative and the comments received on that alternative, the FAA determined that since there are currently no air tour operators conducting operations over the Park, there are no operators to participate in a meaningful discussion and negotiation with the NPS officials at the Park. The FAA is appreciative of the willingness of certain aviation groups, such as

USATA and HAI, to participate in the drafting and implementation of a voluntary agreement. However, without actual operators that would be willing to be made a party to the voluntary agreement, the FAA determined that this alternative would not achieve its desired goal.

Alternative 2 proposed to permit sightseeing tours with several suggested limitations. The FAA partially agrees with some of the commenters who stated that the imposition of partial restrictions would not provide a meaningful result for the commercial air tour operators or achieve the goal of this rulemaking. Moreover, in reviewing the different options that could be used in conjunction with air tour restrictions listed in Alternative 2, the FAA concluded that the application of these options would be operationally difficult for the commercial air tour operators. The terrain within RMNP is quite varied and irregular, with mountain peaks and valleys differing in elevations by thousands of feet. This forces a pilot to be more attentive to the varying topography.

The FAA agrees with the commenters that cited the difficulty in requiring air tour operators to conduct operations only over the existing roadways in RMNP. Certain flight corridors may become necessary in the future, but their establishment will necessitate a much more comprehensive aeronautical and environmental review that just designating the existing roadways. Given the challenging operational environment, the FAA agrees with those comments which claim that restrictions based on the season, time of day, or day of the week would be economically unfeasible for air tour operators.

As noted above, the FAA can reasonably infer from the varied and instructional information received at other parks as to the effects of aircraft noise due to commercial air tour operations. An altitude restriction that would increase the minimum altitude above 2,000 feet above ground level would still have the potential to adversely impact both visitors and resources. Therefore, the FAA determined that the most efficient method of mitigating the potential adverse effects from aircraft noise in this particular case would be to place the preemptive ban on all commercial air tour operations.

Comments Received During the Reopened Comment Period

On November 21, 1996, the FAA reopened the comment period on this rule in order to allow comment on the Draft Environmental Assessment (DEA) that was made available at that time; public responses were also invited to material from the National Park Service that was placed in the docket on December 11, 1996, concerning commercial air tour operations over national park lands.

The information showed that commercial sightseeing operations have become very popular at a number of units of the national park system, and are growing in popularity in others. Many park areas have either documented or estimated significant increases in the volume of air tour activity over the last ten years. For example, air tour flights over Grand Canyon National Park have increased from a few hundred flights per year in the 1960's, to 40,000 to 50,000 per year in 1986, to 80,000 to 95,000 per year in 1996, with up to 40 companies offering sightseeing flights over the park, according to industry, FAA and/or media estimates. Experience at Hawaii Volcanoes and Haleakala National Park in Hawaii has been similar in trend but lower in magnitude, with highs of 23,000 flights per year and 10 operators estimated at Hawaii Volcanoes.

Hard statistics are lacking on the number of sightseeing operations conducted over national park areas because, with the exception of recent fee legislation for Grand Canyon, Hawaii Volcanoes, and Haleakala National Parks, there are no requirements for operators to provide such data. Even at the three parks in the fee legislation, accurate data has not been readily available. In virtually all cases, overflight data has to be estimated based upon a variety of sources, such as airport operations data, limited field observations, FAA projections for airport master planning, industry publications, and voluntary responses to surveys and requests for information.

The trends based upon such numbers indicate increasing interest and levels of sightseeing operations over many national park areas, which correlates with trends for ground visitation. For example, Glacier National Park estimates that between 1986 and 1996 the number of overflights increased from 100 to 800 per year, and the number of commercial air tour operators increased from one to five. Mount Rushmore estimated an increase from 2,400 to 4,000 overflights and from one to four operators during the same time period. Sightseeing tour operators have become based within a few miles of the park boundary during the past two years at Bryce Canyon and Canyonlands, with major expansion of airport facilities either proposed or approved to accommodate increasing tour operations at both places. At present, a new helicopter tour operation is in the process of starting up at Chickamauga-Chattanooga National Military Park.

The extended comment period closed on December 23, 1996. Forty-nine submissions were received during the reopened comment period, most of which were substantive comments on the proposed rule.

Many of the commenters during the reopened period had commented previously, but were either supplementing their prior comments or were adding to or extending their arguments.

Thirty-one commenters used the reopened comment period to express overall support for a complete ban on commercial tour overflights. These include the comments from the Estes Valley Improvement Association, the Town of Grand Lake, CO, the National Parks and Conservation Association, the Pourdre Canyon Group of the Sierra Club, the Estes Park League of Women Voters, and the League of Women Voters of the United States and numerous individuals. These commenters typically stressed the need to maintain the natural enjoyment of the Park's solitude and quiet and argued that overflights by commercial air tour operators would adversely affect that enjoyment. Among those expressing general opposition to the proposal were several other individuals and Bell Helicopters Textron, Inc. Every comment submitted during the reopened comment period was read and considered, although neither all comments nor all points raised will be addressed individually in this preamble. Many of the arguments presented are similar to those that were submitted earlier and discussed above. Several comments, however, suggested new arguments against the imposition of a ban on commercial tour overflights, and these are discussed below.

The new comments that addressed the DEA are discussed in the Final Environmental Assessment for this rule and are not mentioned in the preamble to this rule. A copy of the Final Environmental Assessment has been placed in the rulemaking docket and is available upon request to the person listed in the "FOR FURTHER INFORMATION CONTACT" section above.

Alleging that the reopened comment period was too short, the Helicopter Association International, the Grand Canyon Air Tour Council, and the United States Air Tour Association requested that the DEA be withdrawn and/or the comment period extended to allow additional time for further analysis. However, several commenters such as the League of Women Voters, the Estes Valley Improvement Association, Inc., and the Town of Grand Lake, stated that the time allowed was sufficient to analyze the DEA and found the document adequate in its review of the relevant environmental consequences associated with this rule. Further, as discussed above, the FAA believes that prompt completion of this rulemaking is necessary, because the proposed ban on commercial air tours contained in the NPRM may affect the business and investment decisions of operators. Therefore, while in the abstract it is always desirable to have more rather than less time for public comments, that desire must be balanced against the need to complete the rulemaking in a timely manner. This means that the temporary ban should be implemented before any air tour operator attempts to start commercial air tour operations at RMNP and then is adversely affected financially by the imposition of the subsequent ban. Experience at other national park units suggests that while commercial air tour operations do not cease in the winter months, the number of commercial air tour operations in the winter (as well as the number of new start-up air tour businesses) is not as high as in the warmer months of the year. Therefore, the FAA wants to impose the temporary ban in the more dormant months of the year before new air tour operations are started.

Even though the comments offered by Southwest Safaris (Safaris) focus on the DEA, Safaris alleges certain points that pertain both to the DEA and this final rule. Safaris argues, among other things, that the FAA has no basis on which to ban overflights by commercial air tour operations, because there are no such operations currently. In the absence of such operations, Safaris argues, there is no "measurable" need to prohibit them. Safaris also dismisses National Park Service data indicating that approximately 90 percent of park visitors surveyed stated that noise from helicopters would affect their enjoyment of the park. ("In the last sentence, the word, 'would,' does not mean 'does.' The impact of helicopter noise over RMNP is entirely hypothetical.") The problem with Safaris' argument is that it necessarily implies that the FAA has no authority to act to prevent reasonably foreseeable problems before they occur, and this is simply false. The agency is not obliged to wait until damage occurs before exercising its authority to stop such damage. This issue arises more frequently in the safety context, where most of FAA's regulations arise, but it applies with no less force in the exercise of FAA's other authorities.

Safaris also challenges the FAA's right to apply information gained from experience with commercial tour overflights of other national parks to RMNP. While each park has unique characteristics, the FAA believes that some general understanding can be gained with respect to the business of conducting tour overflights, including its growth pattern and market considerations. The FAA's and NPS experience extends as well to an appreciation of the effect of such overflights on park visitors and resources. While specific topography and park characteristics must be taken into account, the agencies general knowledge can and must inform its projections about the nature and effects of any air tour operations at RMNP. The FAA acknowledges that additional information would improve our ability to forecast specific noise impacts. The agency has determined to impose only a temporary ban on commercial tour overflights at RMNP while a broader rule is considered. This rulemaking allows the FAA to prevent an overflight problem from air tour overflight from developing in RMNP, as it has in so many other national parks.

Safaris goes on to argue, as does the Northern California Airspace Users Working Group, that air tour operations increase rather than diminish the value of parks, and that compared to automobile visitors, air tour visitors cause less damage to park resources. The FAA will not be drawn into any attempt to compare the benefits and costs to park resources of air and ground visits. Experience from other parks that do have air tour operations is that most air tour national park visitors (though by no means all) are also ground visitors. Indeed, this was confirmed by representatives of the air tour industry at the Grand Canyon in discussions with FAA staff earlier this year. Therefore, air tour operations do not in any large measure replace ground visits. In view of RMNP's ready accessibility to a major metropolitan area and the convenience with which it may be visited by automobile, it is reasonable to assume that this will be particularly true at RMNP.

HAI argues that the NPRM should be withdrawn because, in HAI's view, the regulatory language is too vague to be enforceable. HAI claims that the proposed rule would prohibit regional air carrier and on-demand air taxi flights that now traverse the park. The FAA has already addressed the argument that a prohibition on air tours at RMNP would also apply to other kinds of air operations. The short answer is that it would not. The FAA has the same response to the comment of the Soaring Society of America. The Soaring Society's comment argues that gliders do not pollute measurably, either in noise or emissions, and it states the Society would therefore oppose a general ban of aircraft flights over a National Park. The FAA has not imposed any general ban on all aircraft at Rocky Mountain National Park. Only commercial air tour operations would be affected by the temporary ban adopted in this rule.

As to HAI's suggestion here that air tour operations cannot be distinguished from point-to-point service, we believe that neither the operators nor the FAA will have any difficulty in understanding the difference between the high-frequency air tour service that concentrates at places of particular interest and flights that travel as directly as feasible between two distant cities, and happen to traverse the park on a particular route. However, if HAI believes, as it says, that a more specific definition is necessary, we invite HAI to propose one, either for future use at RMNP or as part of the development of a national rule on air tour overflights at national parks.

Regulatory Evaluation

Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule is a "significant regulatory action" as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) helps to assure that Federal regulations do not overly burden small businesses, small non-profit organizations, and airports located in small cities. The RFA requires regulatory agencies to review rules which may have "a significant economic impact on a substantial number of small entities." A substantial number of small entities, defined by FAA Order 2100.14A—"Regulatory Flexibility Criteria and Guidance," is more than one-third, but not less than eleven, of the small entities subject to the existing rule. To determine if the rule will impose a significant cost impact on these small entities, the annualized cost imposed on them must not exceed the annualized cost threshold established in FAA Order 2100.14A.

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule is "a significant regulatory action" as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures. This rule will not have a significant impact on a substantial number of small entities and would not constitute a barrier to international trade. The FAA's criteria for "substantial number" are a number which is not less than 11 and which is more than one third of the small entities subject to this rule.

This regulatory evaluation examines the costs and benefits of special flight rules in the vicinity of Rocky Mountain National Park (RMNP). The rule is intended to preserve the natural enjoyment of

RMNP from any potential adverse impact from aircraft-based sightseeing overflights. Since the impacts of the changes are relatively minor as well as temporary, a full regulatory analysis, which includes the identification and evaluation of cost-reducing alternatives to this rule, has not been prepared.

Costs

At present there are no air tour operations over RMNP and, despite some expression of interest, none have taken definitive action to initiate service at this time. Considering the historical record, the FAA assumed that this final rule will not lead to increased costs to an operator over the next ten years since there are no operators. Moreover, applications for air tour operations have been repeatedly turned down by the town of Estes Park, and it is unlikely that opposition to air tour operators will lessen over time there.

However, while there are no air tour operators that are currently expected to operate in RMNP, information supplied to the docket shows that from time to time small operators have tried to gain approval for operating over RMNP from local authorities. In order not to overlook the potential costs imposed by this rule to potential operators in this analysis, the FAA has attempted to estimate this potential cost. To estimate the potential costs to these potential operators, the FAA employed recent data from the proposed rulemaking on "Flight Rules in the Vicinity of Grand Canyon National Park."

Financial data from two small scheduled fixed wing operators and a helicopter operator that operate over the Grand Canyon were utilized. The three operators chosen are: a 5 passenger CE 206 operator, a 3 passenger Piper Pa–28–180 airplane operator, and a SA–341–G helicopter operator. The estimated annual operating revenues for these operators are respectively, $53,000, $10,000, and $16,000.

Even if the FAA assumes that three relatively small operators would eventually gain authority to operate over RMNP in the next ten years, the costs will still be quite small. The FAA estimates costs in lost revenues to operators due to this rule will range from zero, which is most likely, to $79,000 per year if three operators are denied the ability to do business over RMNP due to the rule.

Benefits

This rule serves to preserve the desired state of quiet and solitude in the park. Currently, the natural enjoyment of the Park is not disturbed by air tour operators and will not be after the rule is promulgated.

Conclusion

Small entities potentially affected by the final rule are potential air tour operators that in the absence of the rule would operate over Rocky Mountain National Park. The FAA estimates from zero to three operators might be affected by the rule, well below the substantial number criteria. The FAA thus concludes that there will not be a significant economic impact on a substantial number of small entities.

International Trade Impact Analysis

The final rule will not have any impact on international trade because the potentially affected operators do not compete with foreign operators. The rule also will not constitute a barrier to international trade, including the export of U.S. goods and services to foreign countries and the import of foreign goods and services to the United States.

Federalism Implications

This action will not have substantial effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Indeed, State and local government representatives have been among the advocates for FAA regulatory action to protect RMNP from the noise created by overflights. Therefore, in accordance with Executive Order 12612, it is determined that this action will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

International Civil Aviation Organization and Joint Aviation Regulations

In keeping with United States obligations under the convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization Standards and Recommended Practices (SARP) to the maximum extent practicable. For this action, the FAA has reviewed the SARP of Annex 10. The FAA has determined that this action will not present any differences.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (Pub. L. 104–13), there are no requirements for information collection associated with the proposed regulation.

Conclusion

For the reasons set forth above, the FAA has determined that this rule is a significant regulatory action under Executive Order 12866. The FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This rule is considered significant under DOT Regulatory Policies and Procedures.

The Amendment

The FAA wishes to be responsive to concerns about the effects of overflights on the national park system. For that reason and due to the unique situation at RMNP the FAA is temporarily banning commercial air tour operations in the vicinity of the RMNP for sightseeing purposes for the limited duration of the SFAR. In consideration of the foregoing, the Federal Aviation Administration amends Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 119, 121, and 135 effective February 7, 1997.

The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

Special Federal Aviation Regulation 78

[Special Operating Rules for Commercial Air Tour Operators in the Vicinity of the Rocky Mountain National Park

[Section 1. *Applicability.* This Special Federal Aviation Regulation prescribes operating rules for commercial air tour flight operations within the lateral boundaries of the Rocky Mountain National Park, CO.

[Section 2. *Definition.* For the purpose of this SFAR: ''commercial air tour'' means: the operation of an aircraft carrying passengers for compensation or hire for aerial sightseeing.

[Section 3. *Restriction.* No person may conduct a commercial air tour operation in the airspace over Rocky Mountain National Park, CO.

[*Expiration:* This SFAR will expire on the adoption of a final rule in Docket No. 27643.**]**
